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ABSTRACT

This guide is organized into three parts. Parts A and B contain bibliographic citations and brief annotations; Part C is an alphabetical listing of all references. Topics included in Part A are: the rationale and history of experiential learning, types of programs, program planning and implementation, program evaluation and quality assurance, faculty resources, and financing. Part B provides details of the six stages in the assessment of student learning: identification, articulation, documentation, measurement, evaluation, and transcription of academic records. (Author/MV)

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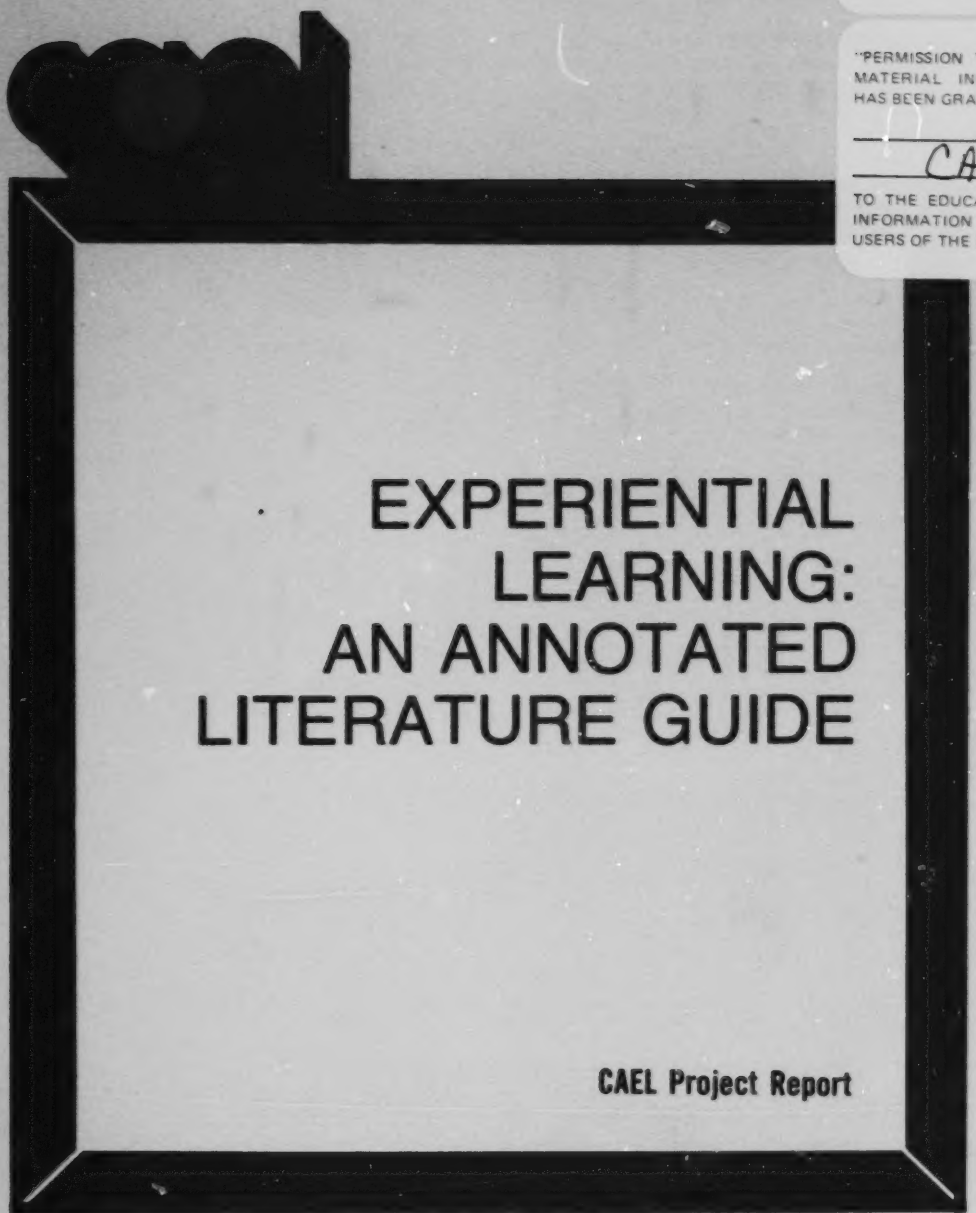

EXPERIENTIAL LEARNING: AN ANNOTATED LITERATURE GUIDE

CAEL Project Report

Cooperative Assessment of Experiential Learning

TM006 744

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#Member of the CAEL Steering Committee and Board of Trustees that took office October 12, 1976.

CAEL is an educational association of 250 institutions of higher education and other educational organizations. It was chartered by the Regents of the State of New York in September, 1976 for the purpose of fostering experiential learning and the valid and reliable assessment of its outcomes.

CAEL (Cooperative Assessment of Experiential Learning) started in March, 1974 as a research and development project involving Educational Testing Service and a group of colleges and universities. Funding was provided initially by the Carnegie Corporation of New York and subsequently by the Ford Foundation, the Lilly Endowment, and the Fund for the Improvement of Postsecondary Education.

Through June 30, 1977 inquiries concerning activities, publications, or membership should be addressed to CAEL, Educational Testing Service, Princeton, NJ 08540.

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CAEL Project Report

Experiential Learning: An Annotated Literature Guide

Edited By
Jane Porter Stutz
Joan Knapp

Cooperative Assessment of Experiential Learning

June 1977

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PREFACE

During its three years as a research and development project, CAEL (Cooperative Assessment of Experiential Learning) has accumulated a sizable collection of published and unpublished literature related to experiential learning and its assessment. The CAEL Board of Trustees decided that a guide which would organize and describe this literature would be a valuable contribution to the CAEL Assembly and to postsecondary education in general. The intent was to produce a reference document of high utility for individuals interested in program and institutional development and in the improvement of assessment practice.

Of central importance to the literature in this field are the publications of CAEL itself. The list of CAEL publications is lengthy. Although many reports were designed for limited distribution and several were replaced by later editions, there are currently (June, 1977) 27 reports available. All except this one are annotated in this guide and are identified by asterisks. (CAEL also publishes a directory of member institutions, which includes the name and address of each institutional representative, and a periodic newsletter, which keeps readers up to date on CAEL activities.)

We began the compilation of this guide by collecting the annotations previously prepared for other CAEL purposes as well as the other literature and citations already on hand. Faculty and staff of the CAEL Faculty Development Program had begun to compile an annotated bibliography for their project, and it was eventually merged with this guide. A letter inviting additional contributions was directed to the Board of Trustees and to others who had been involved in various aspects of CAEL work. All publications suggested for inclusion were sorted into categories and judged according to the following criteria: relevance to experiential learning, usefulness, availability, and uniqueness. The resultant list of about 280 references is not meant to be inclusive. We aimed instead for an array of helpful literature touching on a variety of important aspects of experiential learning and its assessment. Publications about nontraditional education were, for the most part, not included unless especially relevant to experiential learning.

Where necessary, the selected items were then annotated, and all annotations were edited. In cases where more than one annotation had been prepared, we selected one or combined several. For this reason, and because authors of annotations prepared earlier were not always identifiable, authorship of individual annotations is not shown. Instead, a list of contributors follows the Preface.

The preparation of this guide was a typical CAEL undertaking in that it involved the cooperative efforts of many people. Some wrote annotations; others recommended references; still others sent literature. All the contributors are listed on page iii, and we thank them for their participation.

This bibliography has drawn heavily on annotations prepared for other purposes--mostly CAEL activities and publications (the CAEL Resource Book, the Compendium of Assessment Techniques, the Operational Models Project, and the Faculty Development Program). A number of annotations have been adapted from work done for the Office of New Degree Programs by its director, John R. Valley, and we appreciate this special contribution. (The Office of New Degree Programs is an activity jointly sponsored by the College Entrance Examination Board and Educational Testing Service.) In addition, a sizable number of new entries were annotated by the editors.

We also express our appreciation to Warren W. Willingham, CAEL Project Director, and John R. Valley, Director of CAEL Assembly Activities, as well as the CAEL Executive Committee, for reviewing earlier drafts.

Finally, special thanks are due to Climene Lubrano, who searched for library materials and helped with typing, to Candy Ponzurick, who assisted in the final edit, and to Lorraine Simon, who located materials, checked citations, and produced the final report on an automated text processing system.

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INTRODUCTION

This guide is organized into three parts: Part A covers experiential learning and experiential education; Part B treats literature on assessment; Part C is an alphabetical listing of all references. Each section in Parts A and B consists of citations and annotations listed alphabetically by author. Each item is annotated only once, but the reference may appear in more than one section. Numbers in parentheses following a reference or an annotation indicate other sections to which the referenced item applies. An underscored number indicates the section in which the item is annotated. For example, the notation (7, 8, 10) after a reference in Section 2 means that the item is also relevant to Section 7 and Section 8 and is annotated in Section 10. To facilitate use, pages are numbered separately in each section, e.g., Section 1 begins with page 1-1, Section 2 with page 2-1, etc.

Part A: Experiential Learning

All learning involves experience, but for the purpose of this guide "experiential learning" refers especially to learning that occurs outside the classroom in work settings, communities, or self-directed accomplishments. It emphasizes performance over theoretical understanding, while recognizing the importance of both. Although the concept of experiential learning is valid at any education level, with or without academic recognition, this guide focuses on college-level learning for which students might seek academic credit.

Section 1, Rationale and History, covers those concepts drawn from human development, psychology, sociology, and educational philosophy that justify the addition of experiential elements to a learning plan.

Section 2, Types of Programs, touches on the wide variety of forms that experiential learning may take. It deals both with experiential programs sponsored by institutions for their matriculated students and with programs that assess independent, nonsponsored (usually prior) learning for college credit.

Section 3 treats Program Planning and Implementation including problems, procedures, and models for integrating new programs into existing institutional frameworks.

Section 4, Program Evaluation and Quality Assurance, involves the important process of monitoring programs in order to improve effectiveness and to maintain standards of quality for the benefit of the institution, the students, and third parties. The evaluation of student outcomes is especially useful in this process.

Section 5 focuses on the development and use of Faculty Resources--a crucial element in the experiential learning process. Faculty function as providers of experiential learning opportunities, assessors of their outcomes, and evaluators for credit and recognition.

Section 6 deals with Costs and Financing--especially the problem of cost effectiveness.

Part B: Assessment

Assessment in this context is related to student learning rather than assessment of programs. In experiential learning programs, traditional assessment problems are confounded by the highly individualistic nature of the learning and by the absence of close faculty supervision. CAEL has given special attention to these problems and developed a framework for viewing the assessment process. This Part of the guide is organized around that framework which comprises six stages. These stages apply to all experiential learning assessment, although some steps are more important than others, the order may vary, and the stages may overlap.

Identification (Section 7) refers to identifying the learning acquired through experience and defining what learning is of college level.

Articulation (Section 8) means relating that learning to a degree program or other educational goals.

Documentation (Section 9) entails adequate verification through a descriptive record or evidence that an experience with learning potential or learning took place. (It is important to recognize that documentation is only one stage in the assessment process and is not, in and of itself, proof that learning occurred.)

Measurement (Section 10) involves determining the nature and extent of the learning.

Evaluation (Section 11) means deciding whether the learning meets certain standards and whether (or how much) credit should be awarded.

Transcripting (Section 12) is describing the learning concisely and recording it appropriately for the student and for third parties.

Part C: Alphabetical Listing of All Entires

This alphabetical list includes all the references in the guide and functions as an index to Parts A and B. Each reference is followed by a number or numbers indicating the section(s) in which it is relevant. An underscored number shows in which section the item is annotated.

PART A. EXPERIENTIAL LEARNING

SECTION 1. RATIONALE AND HISTORY

A consideration of the rationale and historical antecedents of the recognition of experiential learning is essential for program planners; it can also serve as a strategy for bringing experiential education to the attention of faculty and administrators. The fullest discussion of the history and rationale of experiential learning can be found in various chapters of Experiential Learning: Rationale, Characteristics, and Assessment, by Morris Keeton and Associates. Other references in this section cover the relationship of experiential learning to nontraditional education, human development, educational philosophy, the world of work, and adult education. The pros and cons of the inclusion of experiential elements in educational programs are discussed in several of the cited works.

Agranoff, R., Fisher, W., Mehr, J., & Truckenbrod, P. (Eds.) Explorations in competency module development: Re-linking higher education and the human services. De Kalb, Ill.: Center for Governmental Studies, Northern Illinois University, 1975.

(2, 3)

Argyris, C. Explorations in interpersonal competence-I. Journal of Applied Behavioral Science, 1965, 1, 58-83.

(7, 10)

Argyris, C., & Schön, D. A. Theory in practice: Increasing professional effectiveness. San Francisco: Jossey-Bass, 1974.

(5)

Barton, P. E. Learning through work and education. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Recommends a new structuring of the relationships among work, study, and leisure. Advocates work experience programs, and sees new means of assessment as a possible vehicle for facilitating movement between education and work.

Benne, K. D. Educational field experience as the negotiation of different cognitive worlds. In W. G. Bennis, K. D. Benne, R. Chin, & K. E. Corey (Eds.), The planning of change (3rd ed.). New York: Holt, Rinehart & Winston, 1976.

A brief overview of the rationales for educational use of field experience and an analysis of the implications in the differences between the thinking of behavioral scientists and that of social practitioners and action leaders.

Berg, I. Education and jobs: The great training robbery. New York: Praeger, 1970.

Challenges the common assumption of employers, economists, and educators that improved levels of traditional education lead to improved job performance. Uses a wide variety of data and cites many studies in exploring the relationship between education and performance. Supports the general notion that education should be more relevant to work and that experiential learning is an important means of achieving that end.

Bowen, H. R. Time, informal learning, and efficiency in higher education. Educational Record, 1973, 54, 271-281.
(2, 4, 6)

Carnegie Commission on Higher Education. Less time, more options: Education beyond the high school. New York: McGraw-Hill, 1971.

One of the Carnegie Commission's most influential reports. Recommends basic structural changes that would encourage the breakdown of the rigid lockstep educational pattern and the time-serving characteristic of traditional degree programs. Among the specific recommendations are: (1) Service and other employment opportunities should be created for students between high school and college and at stop-out points in college, and (2) postsecondary opportunities should be encouraged outside formal college and training received should be credited. Suggestions are listed for how this might be done.

Carp, A., Peterson, R., & Roelfs, P. Adult learning interests and experiences. In K. P. Cross, J. R. Valley, & Associates, Planning non-traditional programs: An analysis of the issues for postsecondary education. San Francisco: Jossey-Bass, 1974.

Reports results of a survey of 3,900 adult Americans conducted for the Commission on Non-Traditional Study. Provides a framework for viewing national demand for experiential learning programs and other forms of nontraditional study.

Chickering, A. W. Education and identity. San Francisco: Jossey-Bass, 1969.

An influential book which has served to encourage individualized education, competence-based curricula, and experiential learning. Describes ways of shifting the focus in higher education from concern for the disciplines to concern for persons. Contrasts education and training and stresses that the impact of an experience is significantly influenced by the characteristics of the person who encounters it.

Coleman, J. S. Differences between experiential and classroom learning. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Describes the steps involved in information assimilation (the process by which much of academic learning takes place) and the almost reverse sequence of steps in experiential learning. Another basic difference between the two learning modes is the reliance of information assimilation on a symbolic medium. Finds that various mixes of the two processes are appropriate for different learning needs.

Commission on Non-Traditional Study. Diversity by design. San Francisco: Jossey-Bass, 1973.

Final report of the Commission. Brings clearly into focus the need for and potential of nontraditional education. Clarifies the problem of articulation between experiential learning and traditional curricula and identifies the need for accepted means of granting credit for off-campus learning--both for cognitive knowledge in traditional academic subjects and for other forms of creditable learning that may stem more from practical experience in work or service situations.

Cross, K. P. The integration of learning and earning: Cooperative education and nontraditional study (ERIC/Higher Education Research Report No. 4). Washington, D.C.: American Association for Higher Education, 1973.

Views cooperative education and nontraditional study as an attempt to end the self-imposed isolation of higher education. Cooperative education brings students out of the classroom setting into the world of work. Nontraditional study introduces formal learning experiences into the lives of formerly full-time workers. Sees these trends as a response to pressures to integrate education into the life needs of learners as well as to allow greater educational opportunity for a larger number of potential students. (2)

Felmley, J. Working women: Homemakers and volunteers. Washington, D.C.: Business and Professional Women's Foundation, 1975.

(7, 11)

Gartner, A. P. Credentialing the disenfranchised. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Describes experiential learning as a mode more amenable to the lives of the disenfranchised ("the nonyoung, non-white, nonmiddle- and upper-class, non-full-time, and to a considerable extent nonmale students") than the traditional classroom mode. Stresses the importance of credentials to this group. Argues for standards and procedures of assessing and credentialing experiential learning that are separate from but equivalent to those used for traditional modes of learning.

Gibbons, M. Walkabout: Searching for the right passage from childhood and school. Phi Delta Kappan, May 1974, 596-602.

Concept comes from the aborigine Australian practice, the walkabout--a six months endurance during which the young native must survive alone and return to his tribe an adult or die in the attempt. The author proposes a walkabout model to guide redesigning our own rites of passage. Suggests that it should be experiential and a challenge of the student's own choosing. Challenges might be adventure, creativity, service, practical skill, or logical inquiry. Offers hypothetical illustrations of the model for a boy and a girl.

Gordon, S. C. Campus and workplace as arenas. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.
(2)

Graham, R. A. Voluntary action and experiential education. Journal of Voluntary Action Research, October 1973, 2, 186-193.

Agrees with Dewey and Kohlberg that what matters in personal development is a capacity for logical thought and moral judgment and that such development should be the aim of education. Shows how experiential learning through voluntary action can help develop patterns of moral judgment, and suggests why persons with advanced patterns of moral judgment are apt to engage more frequently in voluntary action than do others.

Harrington, F. H. The future of adult education. San Francisco: Jossey-Bass, 1977.

A review of the history of adult education, its current and future role and needs in higher education. Contains an analysis of a wide range of current educational activities, including new opportunities for adults in external degree programs and other forms of nontraditional study.

Harrison, R., & Hopkins, R. L. The design of cross-cultural training: An alternative to the university model. Journal of Applied Behavioral Science, 1967, 3, 431-460.

Considers the limitations of traditional, university-based training as preparation for the Peace Corps or other service in foreign cultures. Contrasts two forms of training in the critical dimensions of communications, decision making, commitment, ideals, and problem solving. Emphasizes the need to free the trainees from the expectancies of the culture in which they have been living, rather than to achieve saturation in any specific culture to which they will be sent. Although couched in terms of cross-cultural training, the principles advocated are generally useful in experiential education.

Havighurst, R. J., Graham, R. A., & Eberly, D. American youth in the mid-seventies. NASSP Bulletin, 1972, 56(367), 1-13.

The first phase of a major study on the status of youth revealed that the existing combination of schools, colleges, job opportunities, military service, and early marriage has failed, and will continue to fail, to meet the needs of several million young people. Describes "action-learning" in volunteer public service as an additional option for the transition from adolescence to adulthood. Such programs would allow youth to meet educational objectives and earn academic credit through work experience.

(2)

Hesburgh, T. M., Miller, P. A., & Wharton, C. R., Jr. Patterns for lifelong learning. San Francisco: Jossey-Bass, 1973.

Three university presidents explore how an institution of higher education can build systems of learning which institutionalize lifelong learning. All recommend people-centered education and, as a result, recognize options for crediting past learning as a part of this institutionalization. Covers public, civic, and institutional policy.

(2, 3)

Hodgkinson, H. L. Alternative functions and structures in credentialing. In J. F. Hughes & O. Mills (Eds.), Formulating policy in post-secondary education. Washington, D.C.: American Council on Education, 1975.

Suggests demystifying the credentialing process by devising a Regional Examining Institute where the degree would not be the only credential recommended. The Institute would deal with assessing, validating, diagnosing, and improving individual attainments. Such processes would not necessarily lead to a degree since some individuals could be seeking counseling or occupational certification.

Hook, S. John Dewey and his betrayers. Change, November 1971, pp. 22-26.

Explores some common misinterpretations of Dewey's philosophy, including the misconception that experience equals education and that any series of experiences can be substituted for formal schooling. Argues against experiential learning programs that substitute "mere lived experience" for academic study.

Houle, C. O. The external degree. San Francisco: Jossey-Bass, 1973.

(2)

Houle, C. O. Deep traditions of experiential learning. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Traces the history of experiential learning and its evaluation beginning with the broad picture of postsecondary education in the Middle Ages, focusing next on the last third of the 19th century when inclusion of experiential learning in the post-secondary curriculum became an important issue, and concluding with a discussion of why the modern concern with experiential learning is different from that of a century ago.

Keeton, M. T. Dilemmas in accrediting off-campus learning. In D. W. Vermilye (Ed.), The expanded campus (Current Issues in Higher Education 1972). San Francisco: Josssey-Bass, 1972.

(4)

Keeton, M. T. Integrating education and practical experience in American higher education. Paper presented at the annual meeting of the Association of American Colleges, New Orleans, February 1977.

An assessment of the current state of postsecondary experiential education in the United States in light of the contrasting history of the effort to integrate work and education in China. Recommendations for a national policy on experiential education are included.

Keeton, M. T. Credentials for the learning society. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

(4)

Keeton, M. T., & Associates. Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Contains important papers commissioned by the CAEL project during its first year to address the conceptual foundations and the practice of experiential learning and its assessment. As a group, these papers give more direct attention to the rationale of experiential learning than any other current source. The foreword by Virginia Smith notes the factors which have facilitated the increase of credit for experiential learning and the problems that this movement has engendered. The first section of the book gives special attention to the history of experiential learning, its underlying pedagogical philosophy, and its relationship to the credentialing process. The section on characteristics contains several chapters on the nature and objectives of experiential learning and how they differ in different types of educational programs and learning contexts. The last section, on assessment, gives an overview of assessment procedures and outlines a number of critical issues and basic requirements for sound assessment.

Because of their importance, each chapter is annotated separately in the section shown in parentheses:

Morris T. Keeton, "Credentials for the Learning Society" (4)
Cyril O. Houle, "Deep Traditions of Experiential Learning" (1)
Alan P. Gartner, "Credentialing the Disenfranchised" (1)
Melvin Tumin, "Valid and Invalid Rationales" (1)
James S. Coleman, "Differences Between Experiential and Classroom Learning" (1)
Arthur W. Chickering, "Developmental Change as a Major Outcome" (7)
Sheila C. Gordon, "Campus and Workplace as Arenas" (2)
Paul E. Barton, "Learning Through Work and Education" (1)
George Weathersby & Armand J. Henault, Jr., "Cost-Effectiveness of Programs" (6)
Robert Kirkwood, "Importance of Assessing Learning" (1)
Aubrey Forrest, Joan E. Knapp, & Judith Pendergrass, "Tools and Methods of Evaluation" (10)
Urban G. Whitaker, "Assessors and Their Qualifications (10)
Warren W. Willingham, "Critical Issues and Basic Requirements for Assessment" (4).

Kirkwood, R. Importance of assessing learning. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Discusses the educative and credentialing functions of assessment and the need for measures that are clear, equitable, and relevant to stated objectives. Stresses the legitimacy and importance of experiential learning as a creditable aspect of personal and intellectual growth.

Klingstedt, J. L. Philosophical basis for competency-based education. Educational Technology, 1972, 12(11), 10-14.

Discusses the major issues: (1) what competency-based education is, (2) where it came from, and (3) where it is going. Traces the routes of CBE to John Dewey and Experimentalism.

(2)

Knowles, A. S., & Associates. Handbook of Cooperative Education. San Francisco: Jossey-Bass, 1971.

(2)

Knowles, M. S. The modern practice of adult education: Andragogy versus pedagogy. New York: Association Press, 1970.

(3)

Kolb, D., & Fry, R. Towards an applied theory of experiential learning. In C. L. Cooper (Ed.), Theories of group processes. London: John Wiley & Sons, 1975.

Presents an experiential learning theory related to human growth and development that includes a learning-styles inventory. This work has grown out of the NTL-Encounter Group movement and Kolb's work at MIT in the Sloan School of Business. Learning is conceived as a four-stage cycle beginning with a concrete experience and followed by reflective observation, abstract conceptualization, and active behavior experimentation. Provides a much needed theoretical framework within which to work in developing one's own program.

McClelland, D. C. Testing for competence rather than for "intelligence." American Psychologist, January 1973, 28, 1-14.

A challenging and stimulating article expressing the author's deep concern about aptitude/intelligence testing, the logic for which, he feels, overemphasizes school attainments on similar tests. Offers a six-point program for developing tests which will improve the situation, one of the points being assessments of competences relevant to real-world life outcomes. By no means a simple prescription for the maladies it describes, but a clear and forcible call to move educational measurement away from its smoothly familiar paths and into somewhat ambitious challenges.

(10)

Meyer, P., & Petry, S. L. Off-campus education: An inquiry. Atlanta: Southern Regional Education Board, 1972.

A conference report which provides a brief but useful introduction to issues and problems in off-campus learning. Summarizes some considerations concerning assessment, but discussion of the purpose of off-campus education holds greater interest. Outlines four objectives--to help the student to examine and develop his or her own life-style; develop a capacity to examine experience and interpret the learning that has occurred; examine a variety of cultural values and draw implications for his or her own personal commitments; and develop personal skills in setting and achieving goals, identifying and solving problems, and exercising initiative and independence in dealing with human and institutional relationships.

(2)

Nelson, F. A. Has the time gone for an external degree? Journal of Higher Education, 1974, 45, 174-183.

Discusses five factors which may determine the future of the external degree: (1) the historic tradition in America not to separate the functions of instruction and assessment, (2) the threat some external degree programs pose to institutional autonomy and the viability of existing institutions, (3) the need to maintain rigor and quality in programs while seeking innovation and relevance, (4) the problem of how to convert educational or life experience into academic degree credit hour equivalencies after the fact, and (5) leveling of both student enrollments and institutional budgets.

(2)

Newman, F. (Chairman), & the Task Force on Higher Education. Report on higher education (The Newman Report). Washington, D.C.: Government Printing Office, 1971.

Well-known report which questioned the arbitrariness of many credit policies and laid the groundwork for subsequent proposals for competence-based curricula and credits.

Newman, F. (Chairman), & a Special Task Force. The second Newman report: National policy and higher education. Cambridge, Mass.: MIT Press, 1973.

Another major report commissioned by the Department of Health, Education, & Welfare. Four recommendations particularly relevant to experiential learing: (1) 20% of work-study funds should be allocated to upgrade the work component into significant learning experience, (2) creation of a "GI Bill for Community Service;" (3) long-term support for development of ways to evaluate mastery of proficiency needed for success in various fields; and (4) support of start-up costs for examining agencies capable of awarding credentials on the basis of proficiencies.

O'Toole, J. Education, work, and quality of life. In D. W. Vermilye (Ed.), Lifelong learners--a new clientele for higher education (Current Issues in Higher Education 1974). San Francisco: Jossey-Bass, 1974.

Discusses problems stemming from the current, somewhat rigid, American pattern of education for youth, work for most adults, and retirement for those over 65. Most relevant are the rubrics "transitions," "transfers," "credentials," and "work experience." Also identifies four "areas of leverage" for dealing with these problems: (1) the fit between people and jobs, (2) the relationship between education and job success, (3) workplace educational opportunities, and (4) certification and credentialism.

Scribner, S., & Cole, M. Cognitive consequences of formal and informal education. Science, November 9, 1973, 182, pp. 553-559.

Points up well some of the differences between formal classroom education and the kind of learning that take place in the field. Views school as a specialized set of educational experiences which are discontinuous from those encountered in everyday life and which require and promote ways of learning and thinking that often run counter to those nurtured in practical daily activities. In school, information is transmitted and acquired almost exclusively through language, whereas, in practical, nonschool settings, learning takes place through observation, imitation, and doing, and language plays a less important role.

Sexton, R. F. (Ed.) Dimensions of experiential education. Washington, D.C.: National Center for Public Service Internship Programs, 1976.

(2)

Sexton, R. F., & Ungerer, R. A. Rationales for experiential education (ERIC/Higher Education Research Report No. 3). Washington, D.C.: American Association for Higher Education, 1975.

Defines experiential education as learning activities outside normal classroom, " . . . objectives of which are planned and articulated prior to undertaking the experiences, involving activity that is meaningful and real and on the same level as that of other nonstudents in the same nonclassroom environment, and in which the learner has the assistance of another person (most often a faculty advisor) in expanding the learning as much as possible that takes place in nonclassroom settings." (p. 1). Three major sections cover concepts of experiential education relating to the learning gained by the individuals, new dimensions in world of work, and the role of the individual as citizen.

Southern Regional Education Board. Service-learning in the South: Higher education and public service 1967-1972. Atlanta: Author, 1973.

(2, 4)

Stephenson, J. B., & Sexton, R. F. Experiential education and revitalization of the liberal arts. In S. Hook, P. Kurtz, & M. Todorovich (Eds.), The philosophy of the curriculum: The need for general education. Buffalo: Prometheus Books, 1975.

Argues that a marriage of liberal arts objectives with the methods of experiential education can result in a strengthening of liberal education at a time when circumstances severely threaten its future. Offers some examples, some cautions, and some thoughts on implementation.

(3)

Sundberg, N. D. The community concern of the university. In F. R. Paulsen (Ed.), Higher education: Dimensions and directions. Tucson: University of Arizona Press, 1970.

An examination of the rationale for the university's involvement in society, and of the principles for the development of experience-oriented educational programs for community affairs.

Thomas, W. G. Experiential education--A rationale for creative problem solving. Education and Urban Society, 1975, 7, 172-181.

Begins with a brief statement about the growing role of experiential education; points to the need for evidence of intellectual growth to validate experience as education; stresses the value of a problem-centered experience as insuring valid intellectual growth; and presents brief descriptions of some student problem-centered projects at UCLA. Concludes by citing the value of "knowing about" something vs. "knowing" something, stressing the characteristics of successful nontraditional learners: solid prior academic foundation, motivation, clarity of analysis, and communications skills.

Tough, A. The adult's learning projects: A fresh approach to theory and practice in adult learning. Toronto: The Ontario Institute for Studies in Education, 1971.

(2)

Trivett, D. A. Academic credit for prior off-campus learning (ERIC/ Higher Education Research Report No. 2). Washington, D.C.: American Association for Higher Education, 1975.

(2, 11)

Tumin, M. Valid and invalid rationales. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Cautions that experiential learning (or any other innovation short of fundamental change in our social structure) will not change the traditional academic learning and certification system, and that the issue of equal access to higher education will not be adequately addressed by a "devaluation of the currency." But acknowledges a solid rationale for experiential learning as a supplement to traditional education: it can provide opportunities for people to learn things otherwise not learned at all and to learn things well that might otherwise be learned poorly.

*Willingham, W. W., Valley, J. R., & Keeton, M. T. Assessing experiential learning: A summary report of the CAEL project. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(3, 5, 10)

Wirtz, W. W., & the National Manpower Institute. The boundless resource: A prospectus for an education-work policy. Washington, D.C.: New Republic Book Company, 1975.

Key theme is that a national imperative exists for a massive cooperative effort to integrate the worlds of work and education for a more productive, realistic educational and manpower policy. Program elements for an effective education-work policy are considered to be in place but process implementation elements and evaluation procedures are yet to be well-developed. Closes with 11 proposals for immediate change and 4 propositions for achieving interim objectives, all requiring the cooperative efforts of government, industry, labor, and education.

*Reports published by CAEL will be available from Educational Testing Service through June 30, 1977. Thereafter they will be available from the CAEL office in Columbia, Maryland. (See inside front cover for address.)

Young, J. I., & Van Mondfrans, A. P. Psychological implications of competency-based education. Educational Technology, 1972, 12, 15-18.

Predicated on the assumption that the primary purpose of education is to train individuals to be self-motivated learners. Offers a comparative analysis of the impact of the conventional educational system and a competency-based educational system on the following affective learning outcomes: learner interest, learner motivation, learner anxiety, learner frustration, and learner self-concept. Assesses strengths and weaknesses of each system in light of their consequences for each of the above learning outcomes.

SECTION 2: TYPES OF PROGRAMS

An overview of the types of experiential programs offered by institutions can be helpful to individuals planning new programs or to those who have programs in operation and are looking for ways of changing their present offerings. This section is not an all-inclusive catalogue of specific operational programs which are experiential or have experiential components although some directories of programs are included. Citations include descriptions of general types of programs such as prior learning, sponsored experiential learning, external degree, and contract learning as well as several specific program descriptions such as service learning and political internships. These are included because they provide useful models for program planners. There are also references which explain how experiential learning can be incorporated in various disciplines such as teacher education, liberal arts, and English.

Adams, L. Assessing experiential learning in English programs. Paper presented to the Modern Language Association, December 1976. (Available through Thomas A. Edison College, Princeton, N.J. 08540)

An overview of issues and procedures involved in the individual assessment of experiential learning as applied to college English programs.

(10)

Agranoff, R., Fisher, W., Mehr, J., & Truckenbrod, P. (Eds.) Explorations in competency module development: Re-linking higher education and the human services. De Kalb, Ill.: Center for Governmental Studies, Northern Illinois University, 1975.

Proceedings of a conference sponsored by the Center for Governmental Studies, Northern Illinois University, under a grant from the Illinois Board of Higher Education, Higher Education Cooperation Act.

(1, 3)

American Association of State Colleges and Universities, Resource Center for Planned Change. Programs for new clientele. Washington, D.C.: Author, 1977.

Contains descriptive listings of more than 200 programs designed to meet the needs of such new student groups as persons in mid-career change, senior citizens, returning women, disadvantaged students, high school students, and middle management personnel. The directory provides support for the widely held view that programs for new clientele represent one of the most rapidly developing and important thrusts in American higher education.

Barnett, D. C. The emergence of new concepts for teacher education field experience. Interchange, 1975, 6, 44-48.

A review of some alternative concepts of field experience offered in preservice teacher education in Canada: (1) early commitment and early exposure to teaching situation (first hand experience needed before academic course work can have real meaning); (2) decentralization (most of the program is conducted on site in selected schools); (3) community experience (to help teachers understand community surrounding the school); (4) concept of teacher-aide in transition (teacher-aides continue taking courses in summer until requirements for certification are met); and (5) methods courses which are taught undergraduates in selected schools (a variation of the university demonstration school).

Benoit, R. P. Alternative programs for higher education: External and special degrees. Intellect, 1973, 101, 422-425.

Brief overview of a number of nontraditional programs. Based on a survey of 50 institutions. Explains basic distinctions between types of programs and points out those that give credit for experiential learning.

Berte, N. R. (Ed.) Individualizing education through contract learning. University, Ala.: University of Alabama Press, 1975.

Consideration of the philosophical bases and the practical realities of educational individualization through analyses of various approaches to the contract learning process. Several chapters devoted to programs at Empire State, New College-Alabama, Morgan State, Justin Morrill College, and University of Cincinnati. With one exception, the same articles appear in Berte, N. R. (Ed.). Individualizing education by learning contracts. (New Directions for Higher Education No. 10). San Francisco: Jossey-Bass, 1975.

Bollens, J. C., & Marshall, D. R. A guide to participation: Field work, role playing cases, and other forms. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

A guide to learning through planned "real life" situations. Emphasizes the importance of student specification of goals and comments on the nature and value of active involvement by the learner in the learning process. Contains useful examples and explanation of techniques for field participation in social research and offers specific advice on choosing a topic, advance planning, gaining access to sources of information, and analyzing and using the results.

(7, 8)

*Bortnick, B. The assessment of prior learning in a traditional decentralized setting: Flexibility within the challenge examination framework. In Initiating experiential learning programs: Four case studies. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3)

Bowen, H. R. Time, informal learning, and efficiency in higher education. Educational Record, 1973, 54, 271-281.

(1, 4, 6)

Bradley, A. P., Jr. Faculty roles in contract learning. In D. W. Vermilye (Ed.), Learner-centered reform (Current Issues in Higher Education 1975). San Francisco: Jossey-Bass, 1975.

(5)

*See note on availability on p. 1-14.

Burns, R. W., & Klingstedt, J. L. (Eds.) Competency-based education. Englewood Cliffs, N.J.: Educational Technology Publications, 1972.

A collection of 18 chapters presenting an authoritative treatment of major aspects and issues relating to competency-based education. A special concluding annotated bibliography reviewing the research of CBE as it relates to teacher education is included.

Chickering, A. Experience and learning. A Change Magazine White Paper, in preparation, 1977.

An overview of experiential learning which offers definitions and includes six examples of experiential learning covering course related components and full-time off-campus placements. Discusses problems related to purpose, substance, quality, institutional support, and resistance. Additional sections deal with the potentials for students, educational effectiveness, faculty and institutions, cost, and policy implications.

(4)

Coleman, J. S., & Others. The Hopkins Games Program: Conclusions from seven years of research. Educational Researcher, August 1973, 2(8), 3-7.

A general rationale for learning from games (which are experiential tools rather than traditional instructional tools) is set forth, followed by a statement of general conclusions drawn from seven years of research. The program began at Johns Hopkins in 1966 with the objective to learn how games create and influence learning.

Cooperative Education Research Center. An annotated index of cooperative education literature (3rd ed.). Boston: Cooperative Education Research Center, Northeastern University, October 1975.

Organized into the following subject classifications: philosophy and objectives, history and growth, planning and implementation, coordinator's role, faculty role, administrator's role, employer role, federal government role, student role and student outcomes, academic credit and evaluation (includes 32 entries), graduate co-op education, and community and junior college. Materials can be ordered through the clearinghouse.

Cooperative Education Research Center. Summary: Implementation of cooperative education programs. Boston: Cooperative Education Research Center, Northeastern University, 1975

(3)

The Cornell Center for Improvement in Undergraduate Education. The yellow pages of undergraduate innovations. New Rochelle, N.Y.: The Cornell Center for Improvement in Undergraduate Education and Change Magazine, 1974.

An easy-to-use nationwide directory of innovative programs that is a result of a survey of 1,131 accredited four-year traditional institutions; experimental colleges are not included. Four sections are of particular interest: Simulation and Gaming, Independent Study and Research, Off-Campus Education, Interpersonal Process and Techniques.

Cross, K. P. The integration of learning and earning: Cooperative education and nontraditional study (ERIC/Higher Education Research Report No. 4). Washington, D.C.: American Association for Higher Education, 1973.

(1)

Cytrynbaum, S., & Mann, R. D. Community as campus: Project outreach. In P. Runkel, R. Harrison, & M. Runkel (Eds.), The changing college classroom. San Francisco: Jossey-Bass, 1969.

A report on the lively participation of large numbers of students from a large public university in learning projects in the field; major application to psychology undergraduate courses.

Dressel, P. L., & Thompson, M. M. Independent study. San Francisco: Jossey-Bass, 1973.

Based on an extensive survey of practices, a review of [illegible] literature, and interviews. Discusses faculty views and biases which work against self-directed learning for college credit and whether close supervision of students on an individual basis is too time consuming and expensive to be practical. Recommendations for improving independent study programs are offered.

Duley, J. (Ed.) Implementing field experience education (New Directions for Higher Education No. 6). San Francsico: Jossey-Bass, 1974.

(3, 4, 11)

*Duley, J., & Gordon, S. College-sponsored experiential learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

Designed for faculty as well as other professionals concerned with developing effective programs of off-campus experiential learning and assessing the outcomes of those programs. Provides theoretical background for nonsponsored off-campus programs and discusses pragmatic problems of defining educational objectives, developing placements, and preparing students for effective learning experiences, monitoring experiential learning as it proceeds, and integrating the learning following the off-campus experience. Articulated with the CAEL student guide, College-Sponsored Experiential Learning by Nesbitt.

(7, 8)

Eberly, D. J. Service experience and educational growth. Educational Record, 1968, 49, 197-205.

(3)

The external degree. Journal of Higher Education, 1973, 44(6).

Entire issue is devoted to the external degree. Topics of papers range from financing to defining and designing external degrees. Articles by Bowen on financing and Warren on crediting are annotated separately (in Sections 6 and 11, respectively).

Frankel, S. M., Cohen, A. J., & Milsap, M. A. (Eds.) Directory of representative work education programs 1972-73. Washington, D.C.: U. S. Government Printing Office, 1973.

In 1972 there were some 20,000 work education programs in the United States. This directory gives concise information about a sample of 550 of them (the majority at the secondary level, through 100 or so postsecondary programs are included). In most cases the emphasis is upon occupational training, career exploration, or dropout prevention. Typically the work experience carries credit, though no information is provided about assessment procedures.

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*See note on availability on p. 1-14.

Friedland, W. H. The use of field study in undergraduate education. Paper presented at the meeting of the American Sociological Association, New York, August 1973. (8)

Gill, B. A., Hoberman, S., & Persky, B. Developing and testing procedures and instruments for the assessment of the competencies of candidates for the child development associate credential. New York: Child Development Associate Consortium, May 1974. (7, 10)

Gordon, S. C. Campus and workplace as arenas. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

The multiple needs of a college graduate entering the workplace argue for a combination of classroom and experiential learning--not vocational education, but preparation for life. Describes various approaches to nonclassroom learning, discusses problems of integrating work and education, and explores the possible role of government. (1)

Harrisberger, L., Heydinger, R., Seeley, J., & Talburtt, M. An evaluation of experiential learning in engineering education (A Report to the EXXON Education Foundation). Ann Arbor, Mich.: Formative Evaluation Research Associates, August 1975. (4)

Havighurst, R. J., Graham, R. A., & Eberly, D. American youth in the mid-seventies. NASSP Bulletin, 1972, 56(367), 1-13. (1)

Heffernan, J. M., Macy, F. U., & Vickers, D. F. Educational brokering: A new service for adult learners. Syracuse, N.Y.: Regional Learning Service of Central New York, 1976.

A monograph which approximates a handbook on educational brokering. Covers the following major areas: educational brokering in general, selection of services, clientele, staffing, organization, relationships to other institutions, finances, and program evaluation. (7, 8)

Hennessy, B. C. Political internships: Theory, practice, evaluation. University Park, Penn.: Pennsylvania State University, 1970.

Description of the National Center for Education in Politics programs which involved the participation of nearly 550 colleges and universities. Especially interesting because of a report of two evaluation studies (Pennsylvania and Oregon) which compare interns and noninterns on many dimensions such as values, opinions about politics, political participation, etc.

(4)

Hesburgh, T. M., Miller, P. A., & Wharton, C. R., Jr. Patterns for lifelong learning. San Francisco: Jossey-Bass, 1973.

(1, 3)

Hoberman, S., Persky, B., & Williams, B. G. Report of a field study using a critical task behavior-anchored instrument to evaluate the competence of child development workers. New York: Child Development Associate Consortium, January 1975.

(4, 10)

*Hofer, B. K., Sexton, R. F., & Yanarella, E. Exploring the psycho-political development of liberal arts interns. In Initiating experiential learning programs: Four case studies. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3)

Houle, C. O. The external degree. San Francisco: Jossey-Bass, 1973.

A companion book to Diversity by Design (final report of the Commission on Non-Traditional Study) and an important part of the Commission's work. Describes historical roots of the external degree and makes the case for its future prominence. Analyzes programs both here and abroad, explores principal concepts around which new proposals are centered, and discusses issues that will come to the fore as the external degree becomes accepted in higher education. The most comprehensive coverage to date of this nontraditional educational phenomenon. An excellent book for all who have an interest in enlarging and improving access to and quality of higher education.

(1)

*See note on availability on p. 1-14.

Houston, W. R. (Ed.) Exploring competency based education. Berkeley, Calif.: McCutchan, 1974.

A useful collection of different approaches to competency-based teacher education covering theory as well as practice. Especially relevant are articles on identifying competencies, assessing student achievement, and evaluating programs.
(4, 7, 10)

*Initiating experiential learning programs: Four case studies (Compilation of four CAEL Institutional Reports. The Consortium of the California State University and Colleges, Memphis State University, Union College, and the University of Kentucky). Princeton, N.J.: CAEL, Educational Testing Service, 1976.
(3)

James, N. E. Students abroad: Expectations vs. reality. Liberal Education, December, 1976, 599-607. (4)

Kiel, D. H. Student learning through community involvement: A report on three studies of the service-learning model. Atlanta: Southern Regional Education Board, 1972.

Provides a wealth of information from 100 students concerning their own impressions of learning opportunities, learning relationships, and learning outcomes in an internship experience. An interesting outcome of this study was the identification of four general themes that appeared to reflect most of the benefits that students report they experienced: the development of more hopeful, knowledgeable, and concerned attitudes toward community problem solving; an increased motivation to work and learn in communities; realization of the opportunity for personal learning in the realm of action; and impact on the student's own behavior and plans for the future.
(4)

Klingstedt, J. L. Philosophical basis for competency-based education. Educational Technology, 1972, 12(11), 10-14.
(1)

*See note on availability on p. 1-14.

Knowles, A. S., & Associates. Handbook of cooperative education. San Francisco: Jossey-Bass, 1971.

A comprehensive handbook containing a wealth of information on cooperative education covering philosophy and objectives; development and administration of programs; operating procedures; relevance to special groups; and academic, general, and financial administrative practices. Cooperative education is defined as combining periods of classroom instruction with periods of off-campus experience, usually paid employment related to the student's major field of study. Articles are contributed by 21 authors representing a variety of viewpoints.

(1)

Knowles, M. S. Self-directed learning: A guide for learners and teachers. New York: Association Press, 1975.

A resource for developing competence in self-directed inquiry. The learning plan approach outlined can be used by students and teachers for independent study and field experience. Suggestions are given to faculty as to how they can adopt the role of facilitator.

(5, 10)

Marshall, V. C. How to assess college students during external placements: A British view. Journal of Cooperative Education, 1974, 10(2), 1-12.

Describes in broad terms the approaches taken to the assessment of British university and polytechnic students who spend one to two years in industry in so called "Sandwich Courses." Includes a sample assessment form and discussion of areas of assessment.

(10)

Mayville, W. Contract learning. ERIC Higher Education Research Currents, December 1973.

Contract learning has become an important vehicle for monitoring and assessing the outcomes of nontraditional learning programs, especially independent learning activities and other forms of off-campus education, whether they be prior to or during enrollment. This brief review outlines the general nature of learning contracts and describes how they are used at 3 institutions. Also discusses the learning contract as an integral component of a nontraditional program and as a means of program evaluation.

(4, 10)

McKee, R. L., & Gaffney, M. J. The community service fellowship planning project: Final report. Washington, D.C.: American Association of Community and Junior Colleges, 1975.

Describes the findings and recommendations of a project which was a means of providing young people with opportunities to serve their communities while accruing education benefits for later use in postsecondary education. Modeled after the G.I. Bill, the pilot program, which was seen as giving young people opportunities to test themselves in real-world experiences, led to the recommendation of three models.

Meyer, P. Awarding college credit for non-college learning: A guide to current practices. San Francisco: Jossey-Bass, 1975.

(3, 5, 9)

Meyer, P., & Petry, S. L. Off-campus education: An inquiry. Atlanta: Southern Regional Education Board, 1972.

(1)

*Meyers, D. K., & Thomas, J. G. Centralization of experiential education in a liberal arts institution. In Initiating experiential learning programs: Four cases studies. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3)

Murphy, T. P. Government management internships and executive development. Lexington, Mass.: Lexington Books, D. C. Heath, 1973.

A collection of articles covering internship dynamics from an academic viewpoint and from the perspective of the student, as well as overviews of urban, state, and federal internships and fellowships and descriptions of some individual programs.

Nash, D. The personal consequences of a year of study abroad. Journal of Higher Education, 1976, 47, 191-203.

(4)

*See note on availability on p. 1-14.

National Center for Public Service Internship Programs. A directory of public service internships: Opportunities for the graduate, postgraduate, and mid-career professional--1976-77. Washington, D.C.: Author, 1977.

An annually updated directory that describes public service internship programs divided into two categories: (1) those for the professional practitioner who interrupts his/her career to enhance or modify future career goals, and (2) preprofessional programs designed to complement or immediately follow graduate programs. Each description includes such information as address and phone number, director, administering agency, program objectives and design, scope of recruitment and placement, screening and selection, admission requirements, remuneration and stipend, and obligations upon completion of program. The Center also publishes other internship directories, each with a somewhat different focus.

Nelson, F. A. Has the time gone for an external degree? Journal of Higher Education, 1974, 45, 174-183.

(1)

*Nesbitt, H. College-sponsored experiential learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

Designed to help students make the most of off-campus experiential learning. Organized around 11 basic steps including: selecting and preparing for the learning experience, involvement in the work situation, integrating the learning derived from the experience into an ongoing academic program. Useful checklists and worksheets serve as aids for dealing effectively with each of the 11 steps. Articulated with the CAEL handbook for faculty and administrators by Duley and Gordon.

(7, 8, 9)

Nyquist, E. B. The external degree program and nursing. Nursing Outlook, 1973, 21, 372-377.

A prominent educator describes the background and development of the New York Regents External Degree Program with special emphasis on their associate degree in applied science in nursing.

*See note on availability on p. 1-14.

Paulston, R. G. (Ed.) Non-formal education: An annotated international bibliography. New York: Praeger, 1972.

Annotates a large amount of literature concerning very diverse forms of nonsponsored experiential learning under many auspices and conditions, although no specific attention is given to the assessment of such learning.

Peterson, R. E., & Hefferlin, J. B. L. Postsecondary alternatives to meet the educational needs of California adults. The final report of a feasibility study prepared for the California Legislature, 1975. (Available from Postsecondary Alternatives Study, 1116 9th Street, Room 34, Sacramento, Calif. 95814)
(3)

*Ranta, R. Assessing prior learning in a traditional state university. In Initiating experiential learning programs: Four case studies. Princeton, N.J.: CAEL, Educational Testing Service, 1976.
(3)

Ritterbush, P. C. (Ed.) Let the entire community become our university. Washington, D.C.: Acropolis Books, 1972.
(3)

Rivera, J. Exploring alternative learning methods at El Paso Community College (CAEL Special Project Report). El Paso, Tex.: El Paso Community College, 1975.

The results of a project designed to develop a model which takes an interdisciplinary approach across four disciplines to integrate work experiences.

*See note on availability on p. 1-14.

Rosenbaum, A. Public service internships and education on public affairs: Administrative issues and problems. Washington, D.C.: National Center for Public Service Internship Programs, 1976.

Briefly makes a case for service-learning internships and reviews five internship programs--two in the University of Massachusetts, the University of Connecticut, City University of New York, and that at University of Wisconsin, LaCrosse. Then discusses eight common problems related to the operating of such programs for academic credit and finally makes some proposals for the development of a model program of an internship in political science.

Sexton, R. F. (Ed.) Dimensions of experiential education. Washington, D.C.: National Center for Public Service Internship Programs, 1976.

A collection of papers interpreting the role of experiential education, especially service learning internships in higher education, including community colleges, four-year institutions, and nontraditional students. Includes a brief statement by Senator Hubert H. Humphrey on Public Service Internships and an endorsement of a National Youth Service program from the Eleanor Roosevelt Institute.

(1)

Shapek, R. A. Experiential education and service learning internships in Texas. In A. C. Neidhart (Ed.), Continuing education for Texas: Special studies of non-traditional approaches to education. San Marcos: Southwest Texas State University, 1974.

(3, 11)

Sheahan, Sister D. Degree, yes--Education, no. Nursing Outlook, 1974, 22, 22-26.

Reply to Nyquist (see above). Expresses a frequently voiced concern about degrees based entirely on credit for prior learning--namely, that a degree based on demonstrated knowledge and skill does not provide for any kind of socialization process. Questions whether the graduate of such a program in nursing will have any perception of his or her own identity, role, and place in the health care system.

Southern Association of Colleges and Schools, Commission on Colleges. A study of accreditation in adult and continuing education programs. Atlanta: Author, 1973.

(4)

Southern Regional Education Board. Service-learning in the South: Higher education and public service 1967-1972. Atlanta: Author, 1973.

A collection of 13 articles on the development of the service-learning concept, the translation of the concept into five state programs, and the results of practiced approaches to the evaluation of service-learning.

(1, 4)

Spille, H. A., & Hartley, A. C. Credit for experience in practice. Educational Record, 1975, 56, 55-58.

(8, 9)

Stakelon, A. E., & Magisos, J. H. Evaluation of work experience, cooperative education, and youth manpower programs: An annotated bibliography (Bibliography Series No. 28). Columbus, Ohio: Center for Vocational Education, Ohio State University, October 1975.

Articles cited were found through computer-assisted searches of Abstracts of Instructional and Research Materials in Vocational and Technical Education, Resources in Education Current Index to Journals in Education, and National Technical Information Service Data base. Several of the citations appear to relate to college-level experiential education programs.

Student Involvement Assistance Center. Directory. Olympia: Washington State Department of Personnel, Interagency Training Division, 1973. (Available from Student Involvement Assistance Center Department of Personnel, Interagency Training Division, P. O. Box 1789, Olympia, Washington 98504)

Contains a variety of information on internships and other off-campus learning opportunities in the Pacific Northwest. Includes program descriptions and lists of contacts at two- and four-year colleges and vocational schools, names and addresses of intern coordinators in state agencies, and a statement of policy on the application of internship experiences toward merit system classifications. Each annotation includes information concerning criteria for granting credit, how assessment is carried out, and what role the student and employer play in assessment.

(10, 11)

*Tatzel, M. Prospects and methods for interpersonal studies (CAEL Institutional Report No. 2, Empire State College) (Rev. ed.). Princeton, N.J.: CAEL, Educational Testing Service, 1977.

At Empire State College students work with a mentor to develop learning contracts. This report shows how interpersonal learning is integrated into the formal educative process through the learning contract mode. Describes a framework that takes into account cognition, affect, and behavior (i.e., thought, feeling, and action).

(3)

Tough, A. The adult's learning projects: A fresh approach to theory and practice in adult learning. Toronto: The Ontario Institute for Studies in Education, 1971.

Highly readable, concrete, and helpful report on research and practices relating to adults' learning efforts. Reports findings of studies on how and why adults learn, and describes the steps, the planning, and the resources involved in self-directed and group learning.

(1)

Trivett, D. A. Academic credit for prior off-campus learning (ERIC/Higher Education Research Report No. 2). Washington, D.C.: American Association for Higher Education, 1975.

(1, 11)

Trivett, D. A. Competency programs in higher education (ERIC/Higher Education Research Report No. 7). Washington, D.C.: American Association for Higher Education, 1975.

A monograph which explores the origins of competency programs, bases for defining a competency, and relationships between competencies, behavioral objectives, and mastered learning. Describes 8 competency programs at higher education institutions. Also discusses program implementation by contrasting problems in small vs. large institutions and by relating the issues of institutional goals, developing competency statements, assessment and evaluation, learning experiences, new faculty and student roles.

(3, 7)

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*See note on availability on p. 1-14.

Union for Experimenting Colleges and Universities. University without walls: First report. Yellow Springs, Ohio: Union for Experimenting Colleges and Universities, Antioch College, 1972.

A history of the University Without Walls program of the Union for Experimenting Colleges and Universities and an explanation of the program and how it works.

Valley, J. R. External degree programs. In S. B. Gould & K. P. Cross (Eds.), Explorations in non-traditional study. San Francisco: Jossey-Bass, 1972.

A good description of external degree programs at an early stage in their development. Describes six types of programs including a validation model, credits model, an administrative-facilitation model, a modes-of-learning model, an examination model, and a complex-systems model. Some more relevant than others to experiential learning.

Valley, J. R. Increasing the options: Recent developments in college and university degree programs. Princeton, N.J.: Educational Testing Service, 1972. (ERIC Document Reproduction Service No. ED 073 733)

Contains descriptions of exemplary nontraditional degree programs developed between 1969 and 1972. Details are out of date, but the framework for viewing programs, proposals, major studies, and related services remains useful.

Verhaalen, R. J. Hopkins fellows in organizational and community systems: A program in community change-competency education. Baltimore, Md.: The Johns Hopkins University Evening College, June 1976.

Describes and evaluates an experience-based learning module in the applied behavioral sciences and change management. Useful institutional forms and documents are reproduced in the appendix.

What is a service-learning agreement? Synergist, 1975, 4, 30-32.
(7, 8)

Zauderer, D. G. Urban internships in higher education (ERIC/Higher Education Research Report No. 9). Washington, D.C.: American Association for Higher Education, 1973.

A concise, well-organized discussion of internships in which students do supervised work in governmental agencies or units and use the tools and methodology of a particular discipline to examine the institutional cultures in which they are interning. Describes the goals and objectives of internship programs, discusses some problems of this model of university-based urban internships, and delineates alternative approaches to the structure and design of programs. Sections on "The System of University Values and Incentives" and "Faculty Role" are especially useful.

(5)

SECTION 3. PROGRAM PLANNING AND IMPLEMENTATION

Programs that depart significantly from traditional educational activities by including experiential elements bear a special responsibility for planning program components carefully and facilitating a clear understanding of the program through explicit guidelines, procedures, and policies. Included in this section are the reports resulting from the CAEL Operational Models Project. These along with other references outline steps, guidelines, procedures, and policies which are practical and useful for program planners. Other annotated reports describe implementation strategies for cooperative education, prior learning, external degree, competence-based and faculty development programs.

Agranoff, R., Fisher, W., Mehr, J., & Truckenbrod, P. (Eds.) Explorations in competency module development: Re-linking higher education and the human services. De Kalb, Ill: Center for Governmental Studies, Northern Illinois University, 1975.

(1, 2)

Baskin, S. (Ed.) Organizing nontraditional study. San Francisco: Jossey-Bass, 1974.

A source book to assist those who wish to develop and maintain nontraditional programs. Series of articles identifying crucial problems for present and future attention. Contains references to other resources on nontraditional education.

*Bortnick, B. The assessment of prior learning in a traditional decentralized setting: Flexibility within the challenge examination framework. In Initiating experiential learning programs: Four case studies. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Explains how procedures were developed for assessing prior learning in a traditional decentralized system. Concentrates on flexibility within a traditional framework and maintenance of consistency when administration is decentralized. The model is based on the challenge examination.

(2)

*See note on availability on p. 1-14.

*Calhoun, A., Deegan, J., Harvey, L., & Libera, C. An individualized competence-based assessment model (CAEL Institutional Report from Metropolitan State University). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Metropolitan State University is an upper-division, competence-based, baccalaureate-degree-granting institution created in 1971 to serve adults. This operational model focuses on topics such as criterion standards within the context of an individualized, student-centered, competence-based program; the use of external or community-based persons as expert judges of students' competences; the functions and activities of assessment faculty; the strengths and weaknesses of the narrative transcript; and the effectiveness of the University's assessment policies, procedures, and materials.

(5, 11)

*Christensen, F. A. Guidelines and procedures for the assessment of experiential learning and for the selection and training of field experts. (CAEL Institutional Report No. 5, William Rainey Harper College) Princeton, N.J.: CAEL, Educational Testing Service, 1975.

Discusses the steps through which one institution moved in implementing a program for crediting non-sponsored experiential learning: setting up a local task force, use of consultants, site visits to other institutions, preparation of procedural documents, and so forth.

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*See note on availability on p. 1-14.

*Churchill, R., Guerrero, A., Hartle, J., & Horwitz, H. Coordinating educational assessment across college centers (CAEL Institutional Report from Antioch College). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Report on an operational model developed as a result of a systematic analysis of three distinctly different Antioch centers. The model uses four major levels focusing on flow of influence: Level I--the rationale of Antioch College and the individual centers; Level II--programmatic matters bearing on curriculum, faculty, and students; Level III--student assessment based on criterion standards, appraisal of learning, and preparation for assessment; and Level IV--methods of translating experiential learning for nontraditional consumption, outlining credit policies and records of learning outcomes. Discusses five major findings that have important implications for institutions using experiential learning as a core philosophy.

(11, 12)

Cooperative Education Research Center. Summary: Implementation of cooperative education programs. Boston: Cooperative Education Research Center, Northeastern University, 1975.

Intended to provide answers and to offer sound advice to institutions seeking to initiate, expand, or strengthen programs of cooperative education. The research tried to develop a classification of programs, to see if different approaches to cooperative education were differentially successful, and to identify those program elements that contribute to success and those that deter it. Based on a sample of 34 programs.

(2)

Dressel, P. L. Handbook of academic evaluation: Assessing institutional effectiveness, student progress, and professional performance for decision making in higher education. San Francisco: Jossey-Bass, 1976.

A comprehensive treatment of both program evaluation and evaluation of student learning. Although not specifically concerned with the experiential learning, the clarification of basic issues and the guidelines and checklists for planning evaluation can be useful to faculty and administrators of any kind of educational programs.

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*See note on availability on p. 1-14.

Dressel, P. L., Johnson, F. C., & Marcus, P. M. The confidence crisis: An analysis of university departments. San Francisco: Jossey-Bass, 1970.

Based partially on the findings of a research project, this book explores some of the problems and concerns of faculty in the context of their operational unit, the department. Departmental structures vary from those dominated by deans to those in which individual autonomy is essentially absolute. The book gives detailed, concrete, step-by-step procedures that departments can use in evaluating their own systems, controlling curriculum development, and it suggests approaches for reform such as experiential learning programs.

Duley, J. (Ed.) Implementing field experience education (New Directions Higher Education No. 6). San Francisco: Jossey-Bass, 1974.

A collection of papers originally developed for the 1973 Society for Field Experience Education conference. Three are devoted to the role of the student, the faculty supervisor, and the agency supervisor. Other papers are concerned with various aspects of designing and organizing programs or the special character of experiential education in different settings (e.g., a community college, a state university, a statewide program). There is also a useful chapter on evaluating student learning in experiential education.

(2, 4, 11)

Eberly, D. J. Service experience and educational growth. Educational Record, 1968, 49, 197-205.

An examination of a service curriculum: the coming together of society's needs for service, the students' desires for meaningful involvement, and college and university recognition of the educational values in service learning. Describes four operational programs; discusses problems of financing, accreditation, and credit; and offers sequential guidelines for institutions considering developing this type of program.

(2)

Eraut, M. Promoting innovation in teaching and learning: Problems, processes and institutional mechanisms. Higher Education, 1975, 4, 13-26.

Discusses 3 factors critical to any innovation strategy in higher education: faculty release time, support services, and attitudes of students, faculty, and administrators. Outlines a 5-stage model for developing innovations that are responsive to identified problems. Relevant to faculty resources and program planning although experiential learning per se is not discussed. (5)

Francis, J. B. How do we get there from here? Program design for faculty development. Journal of Higher Education, 1975, 46, 719-732.

Describes a 3-stage model for the design and implementation of a faculty development program which guides faculty through the following stages: (1) consciousness raising; (2) focal awareness; and (3) subsidiary awareness. For each stage the author recommends specific program elements. He suggests that program planners assess which stages an institution has reached through an institutional inventory as a prelude to further planning. Directly related to how educational innovation may be introduced to faculty.

(5)

Havelock, R. G. The change agent's guide to innovation in education. Englewood Cliffs, N.J.: Educational Technology Publications, 1973.

An interesting workbook designed to assist administrators in planning and implementing innovation. Based on an analysis of 1,000 studies of innovation and reviewed in draft by 115 educators who perceive themselves as change agents.

Hesburgh, T. M., Miller, P. A., & Wharton, C. R., Jr. Patterns for lifelong learning. San Francisco: Jossey-Bass, 1973.

(1, 2)

Hodgkinson, H. L. Adult development: Implications for faculty and administrators. Educational Record, 1974, 55, 263-274.

(5)

*Hofer, B. K, Sexton, R. F, & Yanarella, E. Exploring the psycho-political development of liberal arts interns. In Initiating experiential learning programs: Four case studies. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Deals with an internship program designed to explore the ethical dimensions of public policy decision making. Purpose of the project was to develop a design for evaluating the participants in this program, especially in respect to the curriculum's emphasis upon values and ethics. (2)

*Initiating experiential learning programs: Four case studies (Compilation of four CAEL Institutional Reports: The Consortium of the California State University and Colleges, Memphis State University, Union College, and The University of Kentucky). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

All four reports deal with programs that are in some sense in an early stage of development. The reports are annotated separately in this section (see Bortnick, Hofer, Meyers, and Ranta). (2)

Knowles, M. S. The modern practice of adult education: Andragory versus pedagogy. New York: Assocation Press, 1970.

A classic, comprehensive guide to the theory and practice of learner-centered adult education focusing on the differences between adult learners and traditional, youthful college students. Details principles and practices for defining purposes, planning and implementing programs, and evaluating outcomes. Includes numerous examples of materials developed at a variety of institutions. (1)

*Kray, E. J. & Hultgren, L. D. Implementing and financing portfolio assessment in a public institution (CAEL Institutional Report from Delaware County Community College). Princeton, N.J.: CAEL, Educational Testing Service, 1976. (6)

*See note on availability on p. 1-14.

Kray, E. J., & Wyman, B. T. Policies, procedures and politics effecting experiential learning. A practicum presented to Nova University in partial fulfillment of the requirements for the degree of Doctor of Education, 1975. (ERIC Document Reproduction Service No. ED 103 080)

Designed to examine the internal political structures within which the policies and procedures of assessing experiential learning were developed by some colleges, and to recommend a course of action for Delaware County Community College in Pennsylvania. A chapter entitled "Summary and Recommendations" includes practical section on business, financial, and funding problems.

(6)

Meinert, C. W., & Penney, S. Credit for life experience: Establishing institutional policy and procedures. Journal of Higher Education, 1975, 46, 339-348.

Lists and briefly discusses the steps an institution must take in order to establish an experiential learning program. In the process the authors (associates in the New York State Education Department) describe the issues for which policies are necessary, and give a few examples of both policies and procedures which support experiential learning programs. Although it is not made explicit, the article follows closely the CAEL outline: identification, articulation, documentation, measurement, evaluation, and transcripting.

Meyer, P. Awarding college credit for non-college learning: A guide to current practices. San Francisco: Jossey-Bass, 1975.

Focuses on a faculty-based model of the assessment and crediting of prior experiential learning on the undergraduate level. Data on current practices were gathered through interviews with administrators, faculty, and students and through examination of written materials from institutions that credit or recognize experiential learning. Also suggests guidelines for institutions and recommends actions to be carried out at the national and regional levels.

(2, 5, 9)

*Meyers, D. K., & Thomas, J. G. Centralization of experiential education in a liberal arts institution. In Initiating experiential learning programs: Four case studies. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Describes the rationale for a new Office of Experiential Education at a liberal arts institution, a model for centralizing experiential education on campus, and the use of contracts for assessing college-sponsored experiential learning. A handbook for students is included in the report.

(2)

Palladino, J. R. Development of a resume/portfolio, student assessment handbook, and a student training institute (CAEL Special Project Report). Framingham, Mass.: Framingham State College, 1975.

Describes one institution's development of procedures for portfolio assessment as a means of evaluating prior learning. Represents an institutional effort early in the CAEL project. See J. Knapp, Assessing Prior Learning--A CAEL Handbook, and A. Forrest, Assessing Prior Learning--A CAEL Student Guide (Section 7) for more recent and comprehensive information on portfolio assessment.

Peterson, R. E., & Hefferlin, J. B. L. Postsecondary alternatives to meet the educational needs of California adults. The final report of a feasibility study prepared for the California Legislature, 1975. (Available from Postsecondary Alternatives Study, 1116 9th Street, Room 34, Sacramento, Calif. 95814)

A statewide study project designed to determine how California can most effectively structure its educational options beyond high school to meet the learning needs of all of its citizens. Offers number of significant recommendations to provide services to meet these needs with considerable emphasis on nontraditional programs incorporating assessment and credit for experiential learning.

(2)

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*See note on availability on p. 1-14.

*Ranta, R. Assessing prior learning in a traditional state university. In Initiating experiential learning programs: Four case studies. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Describes how criteria and procedures were developed for assessing prior experiential learning at a new, innovative college (1 year old) within the structure of a large, traditional state university. The procedures involve portfolio assessment.

(2)

Ritterbush, P. C. (Ed.) Let the entire community become our university. Washington, D.C.: Acropolis Books, 1972.

A collection of essays which present a case for widening the reach of higher education to allow students to devote more time to off-campus experiential education. Reviews proven methods for accomplishing the goal and suggests institutional dismantling to the extent necessary to achieve the goal.

(2)

Shapek, R. A. Experiential education and service learning internships in Texas. In A. C. Neidhart (Ed.), Continuing education for Texas: Special studies of non-traditional approaches to education. San Marcos: Southwest Texas State University, 1974.

Examines, lists, and evaluates systems and means by which academic institutions award credit for job and life experiences in both sponsored and nonsponsored contexts. Also suggests (1) criteria for accreditation of work or life experiences by universities, (2) possible roles for the state in providing leadership and/or clearinghouse functions for Texas universities involved in experiential education, and (3) programs, positions, legislative action, and funding sources to assist with implementation. The significance of the report lies in the statewide nature of the effort and the recommendations.

(2, 11)

*See note on availability on p. 1-14.

Sharon, A. T. Planning the development of measurement and evaluation services for use in occupational programs at postsecondary institutions (Final Report submitted to the Fund for the Improvement of Postsecondary Education) (Project Report No. PR-74-16). Princeton, N.J.: Educational Testing Service, 1974.

(10, 11)

Stephenson, J. B., & Sexton, R. F. Experiential education and revitalization of the liberal arts. In S. Hook, P. Kurtz, & M. Todorovich (Eds.), The philosophy of the curriculum: The need for general education. Buffalo: Prometheus Books, 1975.

(1)

*Tatzel, M. Prospects and methods for interpersonal studies (CAEL Institutional Report No. 2, Empire State College) (Rev. ed.). Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(2)

Trivett, D. A. Competency programs in higher education (ERIC/Higher Education Research Report No. 7). Washington, D.C.: American Association for Higher Education, 1975.

(2, 7)

*Willingham, W. W., & Geisinger, K. F. Developing an operational model for assessing experiential learning. In W. W. Willingham & H. S. Nesbitt (Eds.), Implementing a program for assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Suggests a general approach to developing an operational model--an approach that might lead in many different directions depending upon the nature of the institution and the imagination of the planners. Important program components are described and range from developing a program rationale to the final stage of recording learning outcomes.

*See note on availability on p. 1-14.

*Willingham, W. W., & Nesbitt, H. S. (Eds.) Implementing a program for assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Contains selected material prepared by ETS staff members as background information for the CAEL Operational Models project. Gives a general overview of the main issues addressed in the project and provides reference information that can help other institutions work on an operational model. Includes three papers (annotated elsewhere): "Developing an Operational Model for Assessing Experiential Learning" by W. W. Willingham and K. F. Geisinger; "Setting and Evaluating Criterion Standards" by J. Fremer; and "Assessment and Accreditation: Economic Considerations" by D. T. Jamison and B. B. Wolfe.

(6, 11)

*Willingham, W. W., Valley, J. R., & Keeton, M. T. Assessing experiential learning: A summary report of the CAEL project. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(1, 5, 10)

*Wylie, N. Implementing competency-based assessment of prior learning (CAEL Institutional Report from Florida International University). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Describes the development, trial use, and revision of a competency-based tool for assesing prior learing--The Prior Experiential Learning Evaluation Packet. The author explains the integration of the new assessment process within an existing external degree program; describes how the external degree program and its students interact with other administrative and academic units of the University; and discusses explicit and implicit standards and their implications for assessment in a context in which the responsibility for assessment is partially decentralized.

(11)

*See note on availability on p. 1-14.

SECTION 4. PROGRAM EVALUATION AND QUALITY ASSURANCE

Good assessment practices for experiential learning depend heavily on periodic and systematic program evaluation. Such evaluation would include adherence to sound assessment practices, improving educational effectiveness, and the best procedures for accomplishing both.

Standard general references for educational program evaluation are cited in this section. More specific references concerning accreditation guidelines and evaluation studies of particular programs such as off-campus learning and external degree are listed. Student outcomes as an evaluation dimension are considered in some of the annotations.

American Association of State Colleges and Universities, Resource Center for Planned Change. Program evaluation. Washington, D.C.: Author, 1977.

Lists more than 50 programs which represent organized efforts of institutions to examine their educational programs in order to improve them. Includes program descriptions of student evaluation of instructors, follow-up studies of graduates, course justification in terms of uniqueness and relevance, curriculum development in relationship to university-wide goals, and unique programs in faculty-peer evaluation.

Anderson, S., Ball, S., Murphy, R. T., & Associates. Encyclopedia of educational evaluation: Concepts and techniques for evaluating education and training programs. San Francsico: Jossey-Bass, 1975.

A useful reference book providing comprehensive coverage of the main concepts and techniques of program evaluation. Format is like an encyclopedia with alphabetically arranged, well-documented articles by recognized experts.

Barrett, M. L., & Others. Report of a visit to the University Without Walls, Union for Experimenting Colleges and Universities, Yellow Springs, Ohio. Chicago, Ill: North Central Association of Colleges and Secondary Schools, May 1972. (ERIC Document Reproduction Service No. ED 083 909)

Summarizes visits conducted for the Commission on Institutions of Higher Education of NCACSS by an examining team to evaluate whether UWW should receive correspondent status (first step toward accreditation). Important because it required the association to review and reconsider what kind of entries can be admitted to membership and demonstrated how an accrediting association examines a nontraditional "entry" with an experiential learning component.

Bender, L. W., & Davis, J. A. Danger: Will external degrees reincarnate bogus degree mills? A challenge to state and national agencies. Tallahassee: Department of Higher Education, Florida State University, 1972.

Reviews the evolution of degree mill activity and analyzes regulatory laws in the 50 states. Devotes attention to voluntary institutional efforts and federal role in control. Recommends stronger laws, budgetary support for administering agencies, and improved communications among the states.

Bowen, H. R. Time, informal learning, and efficiency in higher education. Educational Record, 1973, 54, 271-281.

(1, 2, 6)

Chickering, A. Experience and learning. A Change Magazine White Paper, in preparation, 1977.

(2)

Duley, J. (Ed.) Implementing field experience education. (New Directions for Higher Education No. 6). San Francisco: Jossey-Bass, 1974.

(2, 3, 11)

Ekstrom, R. B., & Lockheed, M. E. Giving women college credit where credit is due. Findings: A Quarterly of ETS Research in Postsecondary Education, 1976, 3(3), 1-5.

(6, 7, 11)

George Washington University, Institute for Educational Leadership. Approaches to state licensing of private degree-granting institutions. Washington, D.C.: Author, 1975.

A comprehensive report of a working conference for state licensing officials which details the problems and practices of licensing private degree-granting institutions. The objectives of licensing are to protect the student from fraud, assure the public of the credibility of degrees, and guard against the decline of institutional standards. One of the major problems cited is the need to develop equitable and effective means of assuring quality in time- and place-free programs and those that give credit for prior learning.

Gephart, W. J., Saretsky, G., & Bost, D. How potential employers value components of traditional and external doctorates. Phi Delta Kappan, 1975, 56, 406-408.

Reports the results of an opinion survey that asked deans of colleges of education, school administrators, and personnel administrators in junior colleges about how they viewed employment and promotion possibilities for graduates of external degree prorams at the doctoral level. Concludes that potential employers do not seem to rank the specific characteristics of a degree program high among influences of the hiring decision, and that the degree specifics are even less influential in promotion.

Greenberg, E. Finding and preparing faculty for experimental programs. Paper presented at the meeting of the American Association for Higher Education, Chicago, March 1976.

(5)

Harcleroad, F. F., & Dickey, F. G. Educational auditing and voluntary institutional accrediting (ERIC/Higher Education Research Report No. 1). Washington, D.C.: American Association for Higher Education, 1975.

Considers the use of an educational audit as a means of evaluating and reporting to the public on the achievement of the stated goals and objectives of postsecondary institutions. Such an audit includes assessment of programs, goals, and financial accountability. Draws upon auditing principles used by accounting firms to confirm the financial integrity of businesses or corporations. Not about experiential learning but relevant to evaluation of experiential as well as traditional programs.

Harrisberger, L., Heydinger, R., Seeley, J., & Talburtt, M. An evaluation of experiential learning in engineering education (A Report to the EXXON Education Foundation). Ann Arbor, Mich.: Formative Evaluation Research Associates, August 1975.

A study designed to describe structure and activities of 5 engineering programs exemplifying different approaches to experiential learning, to identify the learning outcomes of this approach in comparison to regular curriculum, to explore the activities producing the outcomes, and to clarify the impact of experiential learning on faculty, students and institutions. Based on interviews of administrators, students, alumni, faculty, and clients, conducted during campus visits.

(2)

Hefferlin, J. B. L. Avoiding cut-rate credits and discount degrees. In K. P. Cross, J. R. Valley, & Associates, Planning non-traditional programs: An analysis of the issues for postsecondary education. San Francisco: Jossey-Bass, 1974.

Argues that quality control has more long-term significance than any other issue in the development of nontraditional study. Describes two mechanisms for such control: government support and regulation of educational institutions, and accreditation by recognized agencies.

Hennessy, B. C. Political internships: Theory, practice, evaluation. University Park, Penn.: Pennsylvania State University, 1970.

(2)

Hoberman, S., Persky, B., & Williams, B. G. Report of a field study using a critical task behavior-anchored instrument to evaluate the competence of child development workers. New York: Child Development Associate Consortium, January 1975.

(2, 10)

Hodgkinson, H., Hurst, J., Levine, H., & Brint, S. A manual for the evaluation of innovative programs and practices in higher education. Berkeley, Calif.: Center for Research and Development in Higher Education, 1974. (mimeo).

A product of an HEW-funded project, this sourcebook contains descriptions of a variety of evaluation instruments including such information as respondents on whom used, items or scales, the response mode, and norm groups. Innovative programs are described under 4 headings: audience innovation, content innovation, teaching and counseling innovation, and delivery system innovation.

Hodgkinson, H. L., Hurst, J., & Levine, H. Improving and assessing performance: Evaluation in higher education. Berkeley, Calif.: Center for Research and Development in Higher Education, 1975.

Final report of an HEW-funded project on uses of evaluation in innovative higher education programs. Presents a model for evaluating both programs and persons: the Criteria-Standards-Technique Model. Includes annotations of programs, instruments, publications, and other resources. Experiential learning is not the only "innovation" treated, but much of the book is relevant.

Houston, W. R. (Ed.) Exploring competency based education. Berkeley, Calif.: McCutchan, 1974.

(2, 7, 10)

Hull, W. F., IV, Lemke, W. H., Jr., & Houang, R. T. The American undergraduate, off campus and overseas: A study of the educational validity of such programs. Washington, D.C.: U. S. Office of Education, March 1974. (ERIC Document Reproduction Service No. ED 090 844)

Explains how off-campus programs can make a unique contribution to higher education if they are clearly defined and receive careful attention from administrators and directors. The authors recommend that off-campus education follow one of two models, either specializing in a few explicit areas or offered as a component of general education.

James, N. E. Students abroad: Expectations vs. reality. Liberal Education, December, 1976, 599-607.

Reports on a study in which 52 American students in study abroad programs in Europe were interviewed, and a follow-up questionnaire was sent a year later (31 replies received). Questions were asked regarding personal and intellectual development as well as political interests and career goals. Over 90% of students interviewed responded favorably towards value of study abroad experience.

(2)

Keeton, M. T. Dilemmas in accrediting off-campus learning. In D. W. Vermilye (Ed.), The expanded campus (Current Issues in Higher Education 1972). San Francisco: Jossey-Bass, 1972.

Argues that improved academic accountability in accrediting experiential learning can be achieved by more valid and reliable measuring of learning in off-campus situations and by getting these methods accepted and recognized by those who determine publicly acceptable credentialing. This involves: (1) broadening the list of objectives acceptable for higher education credit, (2) adjusting to unusual student backgrounds and competences, (3) coping with atypical learning resources and the absence of conventional feedback on learning achieved, and (4) acknowledging alien philosophical outlooks on learning.

(1)

Keeton, M. T. Credentials for the learning society. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976..

Describes the philosophical, social, and historical context which gave rise to the CAEL project. Explores the path that American society of the next few decades might take in its educational and credentialing systems. Proposes that a few reasonably well-defined credentials be established as models, and recommends: (1) two types--a comprehensive passport and specialized credentials directed to more restricted purposes; (2) one or more national consortia to take responsibility for consultation and evaluation services with respect to good practices in the issuance of educational credentials; (3) mass delivery of individualized credentials; (4) both norm-referenced and criterion-referenced credentials; and (5) good models of criterion-referenced standards.

(1)

Kiel, D. H. Student learning through community involvement: A report on three studies of the service-learning model. Atlanta: Southern Regional Education Board, 1972.

(2)

Knapp, J. Exploration of correlates of success in nontraditional postsecondary education: A case study-the CAEL project. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 1976. (ERIC Document Reproduction Service No. ED 127 365)

Focuses on impressions and findings resulting from the CAEL project. Comments center on (1) structure and proliferation of experiential learning programs; (2) emergence of student as advocate; (3) characteristics of students enrolled in such programs; and (4) defining criteria of success for such programs. Suggestions are offered for the improvement of programs especially as improvement might relate to student characteristics.

Lehmann, T. Success after graduation: A study of the baccalaureate graduates of Empire State College. Saratoga Springs, N.Y.: Empire State College, September 1974. (ERIC Document Reproduction Service No. ED 111 304)

A study of Empire State graduates. Findings are presented in 3 parts: educational experiences of graduates at ESC; graduate school admissions experiences of students applying to graduate schools; and work experiences of those students not attending graduate school.

Maier, R. H., & Weidner, E. W. Creating and encouraging an innovative academic environment in higher education. Higher Education, 1975, 4, 69-76.

(5)

Mayville, W. Contract learning. ERIC Higher Education Research Currents, December 1973.

(2, 10)

Nash, D. The personal consequences of a year of study abroad. Journal of Higher Education, 1976, 47, 191-203.

Report of a study which evaluated the effects of a year abroad in France the self-realization of a group of junior year students. Results showed some change at the end of a year abroad, but later assessments showed that changes did not persist. Based on 41 of 47 students from a University of Connecticut program. Control group was 32 students who remained at home during the same year.

(2)

Nosow, S. Students' perceptions of field experience education. Journal of College Student Personnel, 1975, 16, 508-513.

A study of 248 students taking undergraduate field experience courses at Michigan State University. The sample was drawn from 2,125 students in 37 courses in 24 departments in the spring of 1974. Students were interviewed by telephone. Concludes that undergraduate accredited field experience education at Michigan State University is highly successful from the perception of students.

Palola, E. G., & Lehmann, T. Improving student outcomes and institutional decision making with PERC. New Directions in Higher Education, Winter 1976, No. 16.

Explains PERC (Program Effectiveness and Related Costs) as it has been developed at New York's Empire State College, a pioneer in experiential learning. The major question asked is "what kinds of students working with what kinds of faculty in what kinds of learning programs change in what ways at what costs?" PERC attempts to answer questions about student growth, about program effectiveness, and about the links between outcomes and costs.

Southern Association of Colleges and Schools, Commission on Colleges. A study of accreditation in adult and continuing education programs. Atlanta: Author, 1973.

Details evaluation and accreditation guidelines based on a study of the characteristics of adult, continuing education, and nontraditional programs. The study covered major objectives, identification of administrative processes, chain of command for and status of the program within the institution, financial data, staffing patterns, and identification of special public service program areas.

(2)

Southern Regional Education Board. Service-learning in the South: Higher education and public service 1967-1972. Atlanta: Author, 1973.

(1, 2)

Thrash, P. A. Nontraditional institutions and programs: A challenge for the accreditation process. Northern Central Association Quarterly, 1975, 49, 321-333.

Discusses the nature of the accreditation process and developments in nontraditional study as a background for procedures utilized by the Commission on Institutions of Higher Education to evaluate nontraditional institutions and programs. Discusses institutional responsibility for quality assurance where traditional criteria do not apply. Presents 10 experiences of North Central with institutions engaged in nontraditional programs. Two documents of the Federation of Regional Accrediting Commissions of Higher Education are appended which apply to the establishment and evaluation/accreditation of nontraditional postsecondary institutions and programs.

Willingham, W. W. Critical issues and basic requirements for assessment. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Examines assessment issues in experiential learning from three frames of reference--practical, technical, and philosophical--and relates them to the six stages of assessment: identify, articulate, document, measure, evaluate, transcribe. Also offers some suggestions for the kinds of policy and procedural questions that need to be addressed when problems of experiential learning assessment are considered.

(10)

*Willingham, W. W., & Associates. The CAEL validation report. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(10)

*See note on availability on p. 1-14.

Wilson, J. W. Impact of cooperative education upon personal development and growth of values. Boston: Northeastern University, 1974.

Report of a study completed in 1970 of 293 co-op education students as compared with 163 non-co-op education students at Northeastern University. The study sought to ascertain personal changes including career plans, values related to career plans, and attitudes towards people, minorities, women, and the values of the society.

(7, 10)

SECTION 5. FACULTY RESOURCES

In addition to the learner there are often several persons involved in experiential learning assessment who are called assessors. In many cases, these are academic faculty who, in addition, may perform serveral functions aside from assessing such as mentoring, counseling, and academic advising. Because of these new and varied roles, faculty are considered a valuable resource in experiential education who need periodic professional training and development in these new areas.

Articles which discuss faculty development in general are included below, especially as the process relates to the changing responsibilities of faculty in a time of retrenchment. The roles and requirements of faculty in contract learning and experiential learning are discussed in several of the references.

American Association of State Colleges and Universities, Resource Center for Planned Change. Faculty and staff development. Washington, D.C.: Author, 1977.

Describes more than 100 operating programs designed to improve instructional skills, develop leadership, retrain faculty, and improve faculty and staff morale. The primary objective of the programs outlined in the directory is to generally upgrade the quality and performance of the instructional staff.

Argyris, C., & Schön, D. A. Theory in practice: Increasing professional effectiveness. San Francisco: Jossey-Bass, 1974.

Addresses the following questions: What is professional competence? How is competence learned or acquired? How can professional education be redesigned according to the necessities of competent practice taking into account the historic origins of the professions? Directed to faculty; presents a model for integrating thought with action with is grounded in effective use of interpersonal skills. Points out the advantages and disadvantages for simulations and field experience.

(1)

Bergquist, W. H., & Phillips, S. R. A handbook for faculty development. Washington, D.C.: Council for the Advancement of Small Colleges in association with College Center of the Finger Lakes, June 1975.

Focuses on improving quality of teaching, but practical suggestions for implementing a faculty development program are useful regardless of the instructional context. Offers advice on designing faculty development workshops and includes sample documents, instruments, handouts, and exercises.

Bergquist, W. H., & Phillips, S. R. Components of an effective faculty development program. Journal of Higher Education, 1975, 46, 177-211.

Deals mainly with improvement of instructional practice, but the three-part model proposed--organizational (structure), instructional (process), and personal (attitude)--has relevance for developing faculty in the area of experiential learning.

Bradley, A. P., Jr. Faculty roles in contract learning. In D. W. Vermilye (Ed.), Learner-centered reform (Current Issues in Higher Education 1975). San Francisco: Jossey-Bass, 1975.

Describes the nontraditional concepts of faculty required at Empire State College since their role as mentor in a contractual learning situation is different than that of a traditional faculty member.

(2)

*Calhoun, A., Deegan, J., Harvey, L., & Libera, C. An individualized competence-based assessment model (CAEL Institutional Report from Metropolitan State University). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3, 11)

Dressel, P. L., Johnson, F. C., & Marcus, P. M. The confidence crisis: An analysis of university departments. San Francisco: Jossey-Bass, 1970.

(3)

*See note on availability on p. 1-14.

Eble, K. E. Professors as teachers. San Francisco, Jossey-Bass, 1972.

Although this book speaks mainly to the improvement of classroom teaching, several chapters relate to new roles for faculty. A chapter on faculty development emphasizes changes in academic careers and how they relate to various ages and stages in an individual's life. Another chapter titled, "Is Teaching Obsolete?" discusses the role of facilitator and prompter as opposed to the role of teacher.

Eraut, M. Promoting innovation in teaching and learning: Problems, processes and institutional mechanisms. Higher Education, 1975, 4, 13-26.

(3)

Francis, J. B. How do we get there from here? Program design for faculty development. Journal of Higher Education, 1975, 46, 719-732.

(3)

Greenberg, E. Finding and preparing faculty for experimental programs. Paper presented at the meeting of the American Association for Higher Education, Chicago, March 1976.

The author lists 25 critical questions that must be asked and answered about staffing an experimental program and suggests criteria which may be used to evaluate the selection process. The paper is a result of experience as an administrator of a UWW program.

(4)

Group for Human Development in Higher Education. Faculty development in a time of retrenchment. New Rochelle, N.Y.: Group for Human Development in Higher Education and Change Magazine, 1974.

Recommends a system of supports for college teaching effectiveness based on a network of new kinds of relationships between teacher and colleagues, students, administrators, and learning experts. Development activities would be coordinated through a campus teaching institute.

Hill, M. D., & Others. Faculty readiness for innovation: A case study. Harrisburg, Pa.: Harrisburg Area Community College, 1971. (ERIC Document Reproduction Service No. ED 057 767)

This study of faculty readiness for innovative goals and practices measured and evaluated faculty acceptance of non-traditional institutional practice believed necessary to meet community and student learning needs.

Hodgkinson, H. L. Adult development: Implications for faculty and administrators. Educational Record, 1974, 55, 263-274.

Administrators and faculty members, like other mature human beings, continue to grow psychologically. The author divides adulthood into several stages of development, describing the particular problems of each level, and interprets the emotional and mental state of teachers and administrators in terms of job pressures. An interesting framework for viewing and understanding faculty in terms of their resistance to assessing and crediting experiential learning.

(3)

Johnson, J. N. University of Minnesota faculty participation in the University Without Walls. University Without Walls, Minneapolis, Minn., June 1974. (ERIC Document Reproduction Service No. ED 095 733)

Offers a preliminary description of the faculty members at the University of Minnesota who have worked with University Without Walls (UWW) students outside of the conventional classroom setting.

Knowles, M. S. Self-directed learning: A guide for learners and teachers. New York: Association Press, 1975.

(2, 10)

*Lewis, R., Comegys, E., Shepard, L., & Groves, S. The use of expert judgment in the assessment of demonstrated learning in the Antioch Yellow Springs adult degree completion program (CAEL Institutional Report No. 1, Antioch College). Princeton, N.J.: CAEL, Educational Testing Service, 1975.

The unique aspect of this report is its detailed and candid recording of the various issues, questions, and problems that arise when a group of faculty relatively inexperienced in assessing experiential learning meet together for intensive discussion with more experienced faculty concerning institutional policies and practices in assessing prior learning. For that reason, the report is a useful reference for any institution wishing to introduce new faculty members to issues concerning assessment and credentials that deserve their attention.

Maier, R. H., & Weidner, E. W. Creating and encouraging an innovative academic environment in higher education. Higher Education, 1975, 4, 69-76.

Consists mainly of recommendations resulting from the authors' experiences at a new institution (University of Wisconsin-Green Bay). These include suggestions concerning internal processes and organizatin as well as suggestions on improving the interface between institutional innovation and society. "Carrots" to be offered to faculty to lend tangible support to the environment of innovation are suggested.

(4)

Meyer, P. Awarding college credit for non-college learning: A guide to current practices. San Francisco: Jossey-Bass, 1975.

(2, 3, 9)

*See note on availability on p. 1-14.

Nolan, M. F., Mowrer, J. L., & Anderson, L. Faculty attitudes toward the nontraditional study program. Journal of Non-Traditional Studies, in press.

This article reports on the findings of an attitudinal survey completed by College of Agriculture Faculty at the University of Missouri-Columbia. Attitudes toward the concept of non-traditional study, toward nontraditional degrees, toward admission to nontraditional programs, toward the academic quality of such programs, toward the responsibility of public universities to make such programs available and toward their own (faculty) willingness to be involved in such programs are investigated and findings discussed.

Whitaker, U. G. Assessors and their qualifications. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

(10)

Williams, T. J. Faculty and student attitudes toward intern evaluation. Public Service Internship News, March-April 1974, 5-8.

(11)

*Willingham, W. W., Valley, J. R., & Keeton, M. T. Assessing experiential learning: A summary report of the CAEL project. Princeton, N.J: CAEL, Educational Testing Service, 1977.

(1, 3, 10)

Zauderer, D. G. Urban internships in higher education (ERIC/Higher Education Research Report No. 9). Washington, D.C.: American Association for Higher Education, 1973.

(2)

*See note on availability on p. 1-14.

SECTION 6. COSTS AND FINANCING

Financing is a critical aspect of experiential learning assessment. Since experiential learning can be highly individual in character and thus dictates tailor-made assessment, some forms of assessment can be expensive. Program directors must weigh the costs of specific assessment practices against their technical qualities to arrive at procedures which are both sound and cost-effective.

The topic of cost effectiveness and financing of experiential learning programs should include the consideration of the following factors: the financing of students, faculty compensation, institutional costs, and federal and state funding regulations and outcomes. The articles in this section touch on these dimensions of program cost and financing.

Bowen, H. R. Financing the external degree. Journal of Higher Education, 1973, 44, 479-491.

Uses a hypothetical model of a well-established university offering an external B.A. degree and estimates costs of the model. Problems and solutions in financing institutional costs and in financing students are discussed.

Bowen, H. R. Time, informal learning, and efficiency in higher education. Educational Record, 1973, 54, 271-281.

Points out the advantages and disadvantages of nonformal learning particularly in terms of cost and academic standards.

(1, 2, 4)

Craig, A. S. Contracting in a university without walls program. In N. Berte (Ed.), Individualizing education through contract learning. University, Ala.: University of Alabama Press, 1975.

Describes a UWW program at Morgan State University with examples of learning contracts. A discussion of the costs of the program is of particular interest.

Ekstrom, R. B., & Lockheed, M. E. Giving women credit where credit is due. Findings: A Quarterly of ETS Research in Postsecondary Education, 1976, 3(3), 1-5.

(4, 7, 11)

*Jamison, D. T., & Wolfe, B. B. Assessment and accreditation: Economic considerations. In W. W. Willingham & H. S. Nesbitt (Eds.), Implementing a program for assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

A discussion which provides framework for considering the economics of assessment and accreditation. Shows how the economics of cost and efficiency can be applied by administrators, faculty, and others to the analysis of and choice among alternative assessment procedures.

*Kelley, R. L., MacTaggart, T. J., & Spencer, R. A. Analyzing costs in the assessment of prior learning (CAEL Institutional Report from Webster College). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Describes the preparation for and the results of a cost analysis of the assessment of prior learning in two programs. It concludes that total assessment costs are significantly less than costs for conventional classroom instruction, that unit costs diminish as the volume of assessment increases, and that the evaluation of the relative benefits of assessment programs should be made within the context of long-range institutional objectives.

Kray, E. J. The structure and financing of a program to assess experiential learning. Media, Penna.: Delaware County Community College. (ERIC Reproduction Service No. ED 013 371)

Most institutions received neither state nor local funds for this process; forty-six percent charged no fees to students. Of those institutions charging fees, most felt that they were equitable and cost effective. Fifty-eight percent of responding colleges reported that full-time faculty who were involved in the assessment of experiential learning did so as a part of regular load with no additional compensation.

*See note on availability on p. 1-14.

*Kray, E. J., & Hultgren, L. D. Implementing and financing portfolio assessment in a public institution (CAEL Institutional Report from Delaware County Community College). Princeton, N.J.: Educational Testing Service, 1976.

Report presents a financial model in which (1) all parties--student, state, and local sponsor--share in the cost of assessment in the same proportions as they do for the traditional programs of the college; (2) faculty are compensated for their time on a contact hour basis according to the number of credits sought by the student--not the number of credits awarded; and (3) the cost of assessment is shown to be approximately one-fourth the cost of traditional course work.

(3)

Kray, E. J., & Wyman, B. T. Policies, procedures and politics affecting experiential learning. A practicum presented to Nova University in partial fulfillment of the requirements for the degree of Doctor of Education, 1975. (ERIC Document Reproduction Service No. ED 103 080)

(3)

Meeth, L. R. Quality education for less money: A sourcebook for improving cost effectiveness. San Francisco: Jossey-Bass, 1974.

A report on a study of 66 colleges of their cost effective ness--all but one were members of the Council for the Advancement of Small Colleges. Analyses are presented for three groups of colleges according to size. The study contains a wealth of data regarding differing institutional characteristics and various categories of cost data. Thus it serves as a basis for comparison for nontraditional programs.

Meeth, L. R. The impact of state and federal funding regulations on nontraditional postsecondary education: A summary. Washington, D.C.: Institute for Educational Leadership, George Washington University, 1975.

Summarizes a study that shows how nontraditional programs are at a disadvantage compared to traditional programs in terms of the criteria used in federal and state funding formulas and policies. Recommends restructuring formulas and guidelines to take into account the special features and purposes of nontraditional education.

*See note on availability on p. 1-14.

NACUBO. A study of a simulation modeling approach to planning for non-traditional education programs. Washington, D.C.: National Association of College and University Business Officers, 1976.

Reports on a project which set out to develop costing methods to assist institutions of higher education in planning nontraditional programs. Concludes with a useful description of the primary factors which impact on the fiscal viability of traditional programs--both independent and those hosted by another institution.

Rosenstein, B. Cost analysis of selected educational programs. Menlo Park, Calif.: Esmee Fairbairn Economics Research Centre, Stanford Research Institute, 1972. (ERIC Document Reproduction Service No. ED 089 021)

Part of a government report on "Efficiency in Higher Education," this study dealt with the cost of existing or proposed external degree or nontraditional programs in adult higher education, an area which is lacking in substantive cost data. Twenty-seven institutions were contacted. A list of 70 references also has been included as sources of additional information on costs of special and external degree programs.

Stallings, W. M., Aleamoni, L. M., & Heil, D. K. The University of Illinois placement and proficiency system: Description and results. Journal of Higher Education, 1972, 43, 610-619.

Discusses complexities of cost-benefit analyses of placement and proficiency testing and gives some unofficial cost estimates for the system at the University of Illinois.

Weathersby, G., & Henault, A. J., Jr. Cost-effectiveness of programs. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

To analyze cost effectiveness of experiential learning programs, several factors must be considered, such as demand for services, cost of supplying that demand, and the level of decision making (which affects the measures of costs and effectiveness chosen). Examines the concepts of costs and effectiveness and some contextual factors that affect them. Suggests developing a taxonomy of kinds of programs and gathering more information on numbers and kinds of students who take part in experiential learning and the relative costs of programs.

*Willingham, W. W., & Nesbitt, H. S. (Eds.) Implementing a program for assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3, 11)

Wilson, J. E., & Targe, W. A. Assessment centers--Further assessment needed? Personnel Journal, March 1973, 172-179.

(10)

*See note on availability on p. 1-14.

PART B. ASSESSMENT

SECTION 7. IDENTIFICATION

The identification of the specific outcomes of a learning experience is the first step in the assessment of prior learning. For sponsored programs, as in most educational activities, this step follows the establishment of general goals and serves to direct the learning.

Most of the literature in this section concerns identifying college-level knowledge and skills in various areas, such as interpersonal skills, teaching, homemaking, volunteer work, occupations, and social work.

Additional references touch on behavioral objectives, writing competence statements, individual life and educational planning (because it involves identifying competences). The CAEL handbook and guide on assessing prior learning, which are aids in assisting faculty and students throughout the assessment process, cover identification as well as subsequent assessment stages.

Angus, E. L. Identification and articulation of specific learning outcomes of different types of experiential education (CAEL Special Project Report). Mars Hill, N.C.: Mars Hill College, 1975.

Analyzes different types of experiential learning programs and identifies specific skills and competences that might normally be acquired through them. Findings are articulated to a competence curriculum as "tested" experiential options for student mastery of the competences required by the college.

(8)

Argyris, C. Explorations in interpersonal competence-I. Journal of Applied Behavioral Science, 1965, 1, 58-83.

Extremely useful for teachers or researchers in interpersonal relations. Includes a definition of interpersonal competence and a carefully analyzed justification for committing educational resources to the study of this subject. Presents a model for identifying and measuring competence of individuals (intra and inter-personally) and of groups. Its utility is extensive because it is complex enough to cover both affective and cognitive elements in interpersonal communiction.

(1, 10)

Barton, G. Designing competency statements. Instructional Technology, 1972, 17, 16-18.

Proposes that competency statements are behavioral objectives in their best sense. States specifically how and why competence statements should be used.

Bollens, J. C., & Marshall, D. R. A guide to participation: Field work, role-playing cases, and other forms. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

(2, 8)

Bolles, R. N. What color is your parachute? A practical manual for job hunters and career changers. Berkeley, Calif.: Ten Speed Press, 1972.

Presents a new approach to life planning based upon careful self-evaluation and the assessment of personal goals, skills, and desires. Makes a strong case for experiential learning as well as formal education for the primary development of core skills. Exercises and suggestion in the manual are excellent for students who are writing autobiographies in order to develop learning objectives which are related to their personal and career goals.

(8)

*Breen, P., Donlon, T. F., & Whitaker, U. Learning and assessing interpersonal competence--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

A student guide and a companion volume to the handbook on teaching and assessing interpersonal competence. It is based on the same theoretical framework and contains some identical sections. The special contributions of the student guide are chapters on planning for experiential learning and preparing for assessment. Detailed suggestions are offered for preparing a life goals autobiography, articulating personal goals to interpersonal development, and selecting an experiential learning site.

(8, 9, 10)

*See note on availability on p. 1-14.

*Breen, P., Donlon, T. F., & Whitaker, U. Teaching and assessing interpersonal competence--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

A handbook intended to facilitate the teaching, learning, and assessment of college creditable interpersonal competence acquired in experiential situations. Procedures are suggested for identifying and categorizing interpersonal skills, articulating them to students' goals, discovering and utilizing potential experiential learning situations, and assessing the learning of interpersonal skills for academic credit. A core program of assessment strategies is outlined emphasizing the need for multiple techniques.

(8, 9, 10)

Burns, R. W. Behavioral objectives for competency-based education. Educational Technology, 1972, 12, 22-25.

Definitions, uses and criticisms of behavioral objectives are discussed with particular emphasis on the relationships of objectives to accountability and evaluation. Strong support is offered for the conclusion that objectives are not inherently evil but can be misused. A useful distinction between "closed" and "open" objectives is described and defended.

Chickering, A. W. Developmental change as a major outcome. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Discusses the stages and interplay of different aspects of human development. Author's survey of research on human development indicates that the immaturity of young students in ego development, conceptual development, and moral development constrains the uses of both ideas and experience. The implication is that educators should both adjust education for young people to cope with these limitations and devise ways to reengage learners in later years as their potential develops.

*See note on availability on p. 1-14.

Crystal, J. S., & Bolles, R. N. Where do I go from here with my life? New York: Seabury Press, 1974.

A 16-lesson course--complete with homework assignments--in determining vocational and life goals and how to achieve them. Concentrates on the identification and organization of skills, interests, and values. Although focused on career planning, could be the first stages in the prior learning assessment process.

(8, 9)

Daloz, L. Student self-assessment of non-sponsored learning (CAEL Special Project Report). Montpelier: Community College of Vermont, 1975. (ERIC Document Reproduction Service No. ED 114 154)

(8, 9, 10)

*Duley, J., & Gordon, S. College-sponsored experiential learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(2, 8)

Edwins, S. B. The panel review in architectural education (CAEL Special Project Report). Lexington: College of Architecture, University of Kentucky, 1975.

(8, 10)

Ekstrom, R. B., & Lockheed, M. E. Giving women credit where credit is due. Findings: A Quarterly of ETS Research in Postsecondary Education, 1976, 3(3), 1-5.

Describes an ETS study funded by FIPSE to develop methods of assessing and accrediting competences of women acquired from volunteer work and homemaking. Techniques apply equally to male volunteer experiences. Project has developed lists of skills called "I can lists" for some major volunteer and homemaking areas. Article gives special attention to institutional problems of awarding credit while maintaining standards and without jeopardizing the college's financial situation

(4, 6, 11)

*See note on availability on p. 1-14.

Felmley, J. Working women: Homemakers and volunteers. Washington, D.C.: Business and Professional Women's Foundation, 1975.

A bibliography which reviews some 82 recent publications on establishing an economic value for work in the home or in volunteer work for academic or employment credit.

(1, 11)

Fine, S. A., & Wiley, W. W. An introduction to functional job analysis: A scaling of selected tasks from the social welfare field (Methods for Manpower Analysis No. 4). Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research, September 1971.

(10)

*Forrest, A. Assessing prior learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

A general handbook to assist adults in maximizing the value of their prior learning in relation to educational goals and successfully obtaining appropriate credit. The reader is led step-by-step through the process of identifying learning outcomes, relating them to educational goals, documenting experience, measuring learning outcomes, and requesting credit or recognition.

(8, 9, 10, 11, 12)

Gill, B. A., Hoberman, S., & Persky, B. Developing and testing procedures and instruments for the assessment of the competencies of candidates for the child development associate credential. New York: Child Development Associate Consortium, May 1974.

(2, 10)

Heffernan, J. M., Macy, F. U., & Vickers, D. F. Educational brokering: A new service for adult learners. Syracuse, N.Y.: Regional Learning Service of Central New York, 1976. (2, 8)

Houston, W. R. (Ed.) Exploring competency based education. Berkeley, Calif.: McCutchan, 1974.

(2, 4, 10)

*See note on availability on p. 1-14.

Job activity self-report questionnaire (JASRQ). Lafayette, Ind.: Purdue Research Foundation, 1969. (8, 9, 10)

*Knapp, J. Assessing prior learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

Presents a model for portfolio assessment that incorporates eight stages: (1) facilitating the construction and assessment of a portfolio; (2) identifying significant prior experiences; (3) expressing the learning outcomes of prior experiences; (4) articulating prior outcomes to educational goals; (5) documenting the learning experience; (6) measuring the extent and level of prior learning outcomes; (7) judging the learning outcomes; and (8) evaluating prior learning outcomes for awarding credits or recognition. At each stage alternative practical procedures are suggested.

(8, 9, 10, 11, 12)

Koberg, D., & Bagnall, J. The universal traveler: A soft-systems guide to creativity, problem solving and the process of reaching goals. Los Altos, Calif.: William Kaufman, Inc., 1972.

Written by two students of design, this book is only tangentially related to design, offering instead the authors' appealing and personal approach to the general topic of problem solving. It is a strong attempt to instill a self-confident approach to problems. Could be of significant value as the focus for a course in decision making in experiential education.

Laramee, W. A. Educational debriefing: A learning tool. Synergist, 1977, 5, 30-34.

Treats "debriefing" as a systematic means of identifying experiential learning outcomes and mid-stream corrections in order to better focus learning experiences.

(8)

*See note on availability on p. 1-14.

Merritt, D. L. The teacher assessment center: A concept. Peabody Journal of Education, 1973, 50, 309-312.

Proposes Teacher Assessment Centers (TAC) be established to offer services as: (1) specifying behavioral experiences related to certification for the preservice teacher; (2) opportunities for experienced teacher to identify areas of strengths as well as any behaviors which need modification; (3) record preparation indicating individual performance; and (4) assessment for either employees or employers. The author provides some detailed descriptions of the kinds of services that would be provided for both preservice and experienced teachers.

(10)

Minnesota Metropolitan State College (now Metropolitan State University). Individualized educational planning. St. Paul, Minn.: Author, 1975.

A text for a course in individualized educational planning which prepares the new student at a competence-based institution to write his or her own degree plan by identifying goals and demonstrating competences. The "Evidence of Competence" chapter describes some specific techniques for assessment techniques and documentation.

(9, 10)

*Nesbitt, H. College-sponsored experiential learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(2, 8, 9)

Nickse, R. S. Home management and human service competencies (CAEL Special Project Report). Syracuse, N.Y.: Regional Learning Service of Central New York, 1975.

A project which engaged a task force from RLS and five institutions to identify knowledge and skills acquired through home management; to recommend means to assess knowledge and skills; and to recommend criteria for granting credit for such experiential learning.

(10, 11)

*See note on availability on p. 1-14.

Park, D., & Wylie, N. A taxonomy of basic competencies in the world of work (CAEL Special Project Report). Miami: Florida International University, 1975.

The principal product of the project is the Prior Learning Evaluation Packet, a tool for faculty members to use in identifying cognitive competences which students have gained in the work place.

Payne, D. A. (Ed.) Curriculum evaluation: Commentaries on purpose, process, product. Lexington, Mass.: D. C. Heath, 1974.

Contains several excellent articles that are directly relevant to assessing experiential learning. Four papers on educational objectives speak effectively to the general problem of specifying what learning is to be assessed. In another section on measurement techniques, there are articles on principles and techniques in assessing performance, the problem of measuring affective learning, and how to use role playing for assessment purposes.

(8, 10)

*Sharon, A. Assessing occupational competences--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(8, 10)

Trivett, D. A. Competency programs in higher education (ERIC/Higher Education Research Report No. 7). Washington, D.C.: American Association for Higher Education, 1975.

(2, 3)

What is a service-learning agreement? Synergist, 1975, 4, 30-32.

(2, 8)

*See note on availability on p. 1-14.

Whitaker, U., & Breen, P. Interpersonal skills: Their identifcation, classification and articulation to student goals (CAEL Special Project Report). San Francisco: San Francisco State University, 1975.

Identifies, classifies and articulates clusters of interpersonal skills to individual student goals as well as compiling and analyzing data on the documenting, measuring, evaluating, and transcripting functions associated with the assessment of interpersonal skills.

(8)

*Willingham, W. W. Principles of good practice in assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(8, 9, 10, 11, 12)

Wilson, J. W. Impact of cooperative education upon personal development and growth of values. Boston: Northeastern University, 1974.

(4, 10)

*See note on availability on p. 1-14.

SECTION 8. ARTICULATION

Relating prior learning to a degree program or to an individualized educational plan and setting goals for sponsored learning programs are two types of articulation covered in this section. A majority of the citations are annotated elsewhere, particuarly in Section 7 since articulation is closely related to the identification stage in assessment.

Angus, E. L. Identification and articulation of specific learning outcomes of different types of experiential education (CAEL Special Project Report). Mars Hill, N.C.: Mars Hill College, 1975.

(7)

Bollens, J. C., & Marshall, D. R. A guide to participation: Field work, role playing cases, and other forms. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

(2, 7)

Bolles, R. N. What color is your parachute? A practical manual for job hunters and career changers. Berkeley, Calif.: Ten Speed Press, 1972.

(7)

*Breen, P., Donlon, T. F., & Whitaker, U. Learning and assessing interpersonal competence--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 9, 10)

*Breen, P., Donlon, T. F., & Whitaker, U. Teaching and assessing interpersonal competence--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 9, 10)

Crystal, J. S., & Bolles, R. N. Where do I go from here with my life? New York: Seabury Press, 1974.

(7, 9)

*See note on availability on p. 1-14.

Daloz, L. Student self-assessment of non-sponsored learning (CAEL Special Project Report). Montpelier: Community College of Vermont, 1975. (ERIC Document Reproduction Service No. ED 114 154)

Designed to take a close look at the problems encountered by students in the degree development process, and to create a set of written materials to help students develop better learning contracts. The project and outcomes are described in detail, and directions for future development are suggested. For a description of the standard setting process at the Community College of Vermont, see Daloz & Pitkin, 1977, annotated in Section 11.

(7, 9, 10)

*Duley, J., & Gordon, S. College-sponsored experiential learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(2, 7)

Edwins, S. B. The panel review in architectural education (CAEL Special Project Report). Lexington: College of Architecture, University of Kentucky, 1975.

(7, 10)

*Forrest, A. Assessing prior learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 9, 10, 11, 12)

Friedland, W. H. The use of field study in undergraduate education. Paper presented at the meeting of the American Sociological Association, New York, August 1973.

Describes the Community Studies program at the University of California, Santa Cruz, in which students delineate a field project, take courses in preparation, spend six months full-time in the field, and consolidate the learning experience by preparing a senior thesis.

(2)

*See note on availability on p. 1-14.

Heffernan, J. M., Macy, F. U., & Vickers, D. F. Educational brokering: A new service for adult learners. Syracuse, N.Y.: Regional Learning Service of Central New York, 1976.

(2, 7)

Job activity self-report questionnaire (JASRQ). Lafayette, Ind.: Purdue Research Foundation, 1969.

(7, 9, 10)

*Knapp, J. Assessing prior learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 9, 10, 11, 12)

Laramee, W. A. Educational debriefing: A learning tool. Synergist, 1977, 5, 30-34.

(7)

*Nesbitt, H. College-sponsored experiential learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(2, 7, 9)

Payne, D. A. (Ed.) Curriculum evaluation: Commentaries on purpose, process, product. Lexington, Mass.: D. C. Heath, 1974.

(7, 10)

Ramsay, W. R. Cultivating agency allies. Synergist, 1976, 5, 18-20.

Urges the need to develop procedures to handle the many kinds of problems that can arise between educational institutions and community agencies in student volunteer programs. Discusses "educational debriefing"--a technique to bring student learning to conscious level--and the issues of performance and conduct standards. This is a practical article by an experienced program coordinator.

(9)

*See note on availability on p. 1-14.

*Sharon, A. Assessing occupational competences--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 10)

Spille, H. A., & Hartley, A. C. Credit for experience in practice. Educational Record, 1975, 56, 55-58.

The philosophical background that prompted the University of Wisconsin-Green Bay to create procedures for the evaluation of "informal learning" for degree credit and the procedures themselves are described. Brief profiles of the more than 150 students who participated in this program are included. Emphasis is placed upon the students themselves, who bear the responsibility for relating their experiences to University requirements, providing documentation, and indicating the total number of units desired.

(2, 9)

What is a service-learning agreement? Synergist, 1975, 4, 30-32.

Explains purpose and advantages of an agreement for student, faculty sponsor, and agency supervisor. Includes sample of completed agreement.

(2, 7)

Whitaker, U., & Breen, P. Interpersonal skills: Their identification, classification and articulation to student goals (CAEL Special Project Report). San Francisco: San Francisco State University, 1975.

(7)

*Willingham, W. W. Principles of good practice in assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 9, 10, 11, 12)

*See note on availability on p. 1-14.

SECTION 9. DOCUMENTATION

Confirmation of experience and verification of learning can serve an important function in the assessment process; however, relatively little literature focuses solely on documentation as it is a somewhat unexplored area. The CAEL Validation Report (see Section 10) points to the need for more explication and research in this area. A major reference on the use of documentation in sponsored learning is the CAEL Institutional Report by Permaul and Miko. For discussion of documentation in prior learning assessment see especially the student guide by Forrest and the handbook by Knapp.

*Breen, P., Donlon, T. F., & Whitaker, U. Learning and assessing interpersonal competence--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 10)

*Breen, P., Donlon, T. F., & Whitaker, U. Teaching and assessing interpersonal competence--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 10)

Crystal, J. S., & Bolles, R. N. Where do I go from here with my life? New York: Seabury Press, 1974.

(7, 8)

Dailey, C. A. Assessment of lives: Personality evaluation in a bureaucratic society. San Francisco: Jossey-Bass, 1971.

(10)

Daloz, L. Student self-assessment of non-sponsored learning (CAEL Special Project Report). Montpelier: Community College of Vermont, 1975. (ERIC Document Reproduction Service No. ED 114 154)

(7, 8, 10)

*Forrest, A. Assessing prior learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 10, 11, 12)

*See note on availability on p. 1-14.

Job activity self-report questionnaire (JASRQ). Lafayette, Ind.: Purdue Research Foundation, 1969.

(7, 8, 10)

*Knapp, J. Assessing prior learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 10, 11, 12)

Meyer, P. Awarding college credit for non-college learning: A guide to current practices. San Francisco: Jossey-Bass, 1975.

(2, 3, 5)

Minnesota Metropolitan State College (now Metropolitan State University). Individualized educational planning. St. Paul, Minn.: Author, 1975.

(7, 10)

*Nesbitt, H. College-sponsored experiential learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(2, 7, 8)

Nolting, G. A. Portfolio development versus course participation as it influences cognitive achievement in farm management. Unpublished Ph.D. Dissertation. Columbia: University of Missouri-Columbia, 1977.

(10, 11)

*Permaul, J. S., & Miko, M. B. Documentation and evaluation of sponsored experiential learning (CAEL Institutional Report No. 3, University of California at Los Angeles) (Rev. ed.). Princeton, N.J.: CAEL, Educational Testing Service, 1977.

Describes the procedure developed at UCLA that explicates the learning that is taking place and therefore helps to shape and improve subsequent learning experiences of the student. The method focuses upon a record-reflection log and a process-assessment matrix as tools for assessing sponsored learning. These devices emphasize the role of the student and local supervisors in evaluating and molding learning outcomes.

(11)

*See note on availability on p. 1-14.

Ramsay, W. R. Cultivating agency allies. Synergist, 1976, 5, 18-20.

(8)

Spille, H. A., & Hartley, A. C. Credit for experience in practice. Educational Record, 1975, 56, 55-58.

(2, 8)

*Willingham, W. W. Principles of good practice in assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 10, 11, 12)

*See note on availability on p. 1-14.

SECTION 10. MEASUREMENT

Since measurement is the heart of the assessment process, this category contains more references than any other section of the guide. Much of the literature cited concerns specific measurement techniques: interviews, simulation and gaming, portfolios, performance testing, product assessment, rating scales. Overly technical references are avoided. Included are items that treat important measurement problems such as validity, reliability, and the use of quantitative judgment. The references include research studies, how-to-do-it guides, and textbook-type material of varying levels of difficulty.

Items on measuring experiential learning in different subject fields such as English, art, political science interpersonal skills are listed.

The CAEL Validation Report, by Willingham and Associates, is specifically concerned with reliability and validity as they relate to the measurement and evaluation of experiential learning.

Abt, C. C. Serious games. New York: Viking Press, 1970.

Explores the ways in which games can be used to instruct and inform. Examines topics such as evaluating the cost-effectiveness of games and improving education with them. The use of games in general areas such as the physical and social sciences, vocational guidance, and government and industrial planning is discussed.

Adams, L. Assessing experiential learning in English programs. Paper presented to the Modern Language Association, December 1976. (Available through Thomas A. Edison College, Princeton, New Jersey 08540)

(2)

Adkins, D. C. Principles underlying performance tests. In D. A Payne (Ed.), Curriculum evaluation: Commentaries on purpose, process, product. Lexington, Mass.: Heath, 1974.

Contains suggestions for developing performance-testing techniques, and gives a succinct overview of some of the more critical principles of measurement: validity, reliability, objectivity, and practicality of construction, administration, and scoring. Offers suggestions for improving rating procedures. (Article abridged from "Principles Underlying Observational Techniques of Evaluation, Educational and Psychological Measurement, 1951, 2, 29-51.)

Argyris, C. Explorations in interpersonal competence-I. Journal of Applied Behavioral Science, 1965, 1, 58-83.

(1, 7)

Barbato, B. A. The use of portfolios in the assessment of prior learning (CAEL Special Project Report). Webster Groves, Mo.: Webster College, 1975.

Describes procedures one institution went through to establish preliminary guidelines for development of student portfolios and for their evaluation. Represents an early stage of a program that is now more highly developed. (See Kelley, MacTaggart, & Spencer annotated in Section 6, for a cost analysis of the same program.)

Bass, B. M. An analysis of the leaderless group discussion. Journal of Applied Psychology, 1949, 33, 527-533.

Describes an observational research study that attempts to quantitatively evaluate the LGD technique. Focuses on the degree of interrater agreement about the effectiveness of LGD.

Bass, B. M. The leaderless group discussion as a leadership evaluation instrument. Personnel Psychology, 1954, 7, 470-477.

Summarizes the results of LGD research and examines the relationship of performance in a LGD to four categories of variables: group status as measured by rank, esteem as measured by merit ratings, personality characteristics associated with leadership, and leadership performance in other quasi-real situations. In each case, the findings indicate that performance in a LGD correlated positively as a valid measure of successful leadership to the above four variables.

Berger, B., & Hoberman, S. Notes on the use of group oral tests. Public Personnel Review, 1955, 16, 143-147.

A nontechnical description of the "technical-oral test," a leaderless group discussion which was one of three parts of a Civil Service examination. Includes instructions to candidates, diagram of seating plan, and a rating scale.

Bingham, W. V. D., Moore, B. V., & Gustad, J. W. How to interview (4th Rev. ed.). New York: Harper, 1959.

A simply written guide to constructing and performing the interview. Contains an entire chapter on oral examinations in the Civil Service context. Considered a classic in its field.

Boyd, J. L., Jr., & Shimberg, B. Handbook of performance testing: A practical guide for test makers. Princeton, N.J.: Educational Testing Service, 1971.

Describes how to plan, develop, and grade work sample tests, and the types of documents needed for their administration. Provides a portfolio of tests, such as those for machinist, cosmetologist, dental hygienist, and bench-woodworker.

*Breen, P., Donlon, T. F., & Whitaker, U. Learning and assessing interpersonal competence--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 9)

*Breen, P., Donlon, T. F., & Whitaker, U. Teaching and assessing interpersonal competence--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 9)

*See note on availability on p. 1-14.

Brody, W. Judging candidates by observing them in unsupervised group discussion. Personnel Journal, 1947, 26, 170-173.

A "how-to" article that guides the reader in development and administration of leaderless group discussions. Judges observed an undirected group discussion among candidates for a medical position in New York City's Department of Health and used factors such as appearance and manner, speech, attitude towards group, leadership, contribution to group performance, and scientific approach to fill a vacant position. The method is suggested as having various advantages over the normal personal interview.

Buros, O. K. (Ed.) The seventh mental measurements yearbook. Highland Park, N.J.: Gryphon Press, 1972.

Primary source of information on standardized achievement and performance tests. Consists of objective, comprehensive test reviews organized by subject and written by recognized specialists representing various viewpoints. The standard reference for anyone seeking information concerning validity of specific published tests.

Byham, W. C. Assessment centers for spotting future managers. Harvard Business Review, 1970, 48, 150-165.

A relatively succinct appraisal of assessment centers as an approach to identifying industrial managerial talent. Concepts require reformulation into an academic framework if the information is to be evaluated in terms of the potential benefit of an assessment center as an educational center. Similarly, discussions of center operation provide useful insights into ways of adapting the method to the purposes of academic assessment.

Coffman, W. E. Essay examinations. In R. L. Thorndike (Ed.), Educational measurement (2nd ed.). Washington, D.C.: American Council on Education, 1971.

Gives a systematic analysis of essay examinations and describes their construction, limitations, scoring procedures, technical problems, and needed research in the area. Especially valuable to those working with subjectively-scored measures. The model presented for evaluation of essay tests is also appropriate for evaluating interviews, role playing, simulations, portfolios, and other complex behavioral products.

College Entrance Examination Board. 1976-77 advanced placement course description: Art. New York: Author, 1976.

A most useful example of guidelines for product assessment. Although written for the student and the teacher rather than the assessor, the criteria for assessment are implicit.

Crooks, L. A. The selection and development of performance measures for assessment center programs (Research Memorandum RM-74-6). Princeton, N.J.: Educational Testing Service, 1974.

Contains a brief description of almost every technique used in assessment centers. Explains how a set of these techniques can be integrated for a senior-level assessment program and an early identification of talent program.

Dailey, C. A. Assessment of lives: Personality evaluation in a bureaucratic society. San Francisco: Jossey-Bass, 1971.

Challenges the common selection assessment policy of judging an individual's future performance on the basis of any information that can be conveniently codified and filed. Sees as an alternative a humanistic assessment philosophy based on the individual's life history and offers suggestions for workable procedures. Supports the notion that documentation should not substitute for assessment.

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Daloz, L. Student self-assessment of non-sponsored learning (CAEL Special Project Report). Montpelier: Community College of Vermont, 1975. (ERIC Document Reproduction Service No. ED 114 154)

(7, 8, 9)

Edwins, S. B. The panel review in architectural education (CAEL Special Project Report). Lexington: College of Architecture, University of Kentucky, 1975.

A review of the uses and purposes of the review panel or "jury" in the education of architects with suggestions for modifications in this use of expert judgment. The primary use of the technique as described here is for formative evaluation. A good example of the educative function of assessment.

(7, 8)

Engel, J. D. An approach to standardizing human performance assessment (HumRRO Professional Paper 26-70). Alexandria, Va.: Human Resources Organization, October 1970.

Author discusses some factors he feels to be critical in standardizing and evaluating methods of performance assessment. Concentrates on two primary factors--a task classification system and a performance measure or criterion classification system. Also describes HumRRO research program on the latter.

Fear, R. A. The evaluation interview (2nd ed.). New York: McGraw-Hill, 1973.

Written for individuals who interview job applicants, but much of the discussion is applicable to educational situations in which the nature and extent of a student's knowledge of a particular topic are to be determined. Contains a great deal of common sense advice concerning what to do and not to do in order to carry out a successful interview.

Fine, S. A., & Wiley, W. W. An introduction to functional job analysis: A scaling of selected tasks from the social welfare field (Methods for Manpower Analysis No. 4). Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research, September 1971.

Presents a method of describing jobs precisely and accurately by defining component tasks according to their nature and level. Basic tool is a series of seven scales: three Worker Function Scales, three General Development Scales, and a Worker Instruction Scale. Each level of each scale is defined, and the levels of the Worker Function Scales are illustrated with tasks from the social welfare field. Useful for identifying competences acquired (or to be acquired) through experiential learning and for setting performance standards.

(7)

Fiske, D. W. Why do we use situational performance tests? Personnel Psychology, 1954, 7, 464-469.

Fiske defines situational tests as those which (1) assess "real-life" behavior, including social interaction, (2) involve complex behavior, not pure psychological traits, and (3) are characterized by problems of reliability. Their purpose is to evaluate a person's total performance in a narrow class of situations or in a specific job. Article describes a three-dimensional model to account for behavior in situational test performance. Although written from the standpoint of personnel selection, the model may be of some appropriateness to the explanation of student behavior in situational assessment.

Fitzpatrick, R., & Morrison, E. J. Performance and product evaluation. In R. L. Thorndike (Ed.), Educational measurement (2nd ed.). Washington, D.C.: American Council on Education, 1971.

Describes work sample tests and distinguishes them from other kinds of simulated testing conditions. Discusses general principles inherent in such measures. Describes a variety of performance measures including their development, scoring, and administration.

Flanagan, J. C. The critical incident technique. Psychological Bulletin, 1954, 51, 327-358.

Describes development and principles of a technique which can be adapted for use in monitoring and assessing learning outcomes of field experience. (See Duley, annotated in Section 3, and Permaul & Miko, annotated in Section 9). The critical incident technique outlines procedures for collecting observed incidents having special significance and meeting systematically defined criteria.

Flanagan, J. C. Some considerations in the development of situation tests. Personnel Psychology, 1954, 7, 461-464.

Explains the advantages and disadvantages of using situational tests to measure attitude, motivation, and other personality factors.

*Forrest, A. Assessing prior learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 9, 11, 12)

*See note on availability on p. 1-14.

Forrest, A., Knapp, J. E., & Pendergrass, J. Tools and methods of evaluation. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Describes problems associated with portfolio assessment and the narrative transcript, and recommends procedures and techniques leading to the solution of these problems. Specific measurement techniques described include product assessment, performance assessment, simulations, essay examinations, and interviews. Offers 11 recommendations for improvements in developing and selecting assessment tools. Includes sample narrative transcripts.

(12)

Franks, B. D., & Deutsch, H. Evaluating performance in physical education. New York: Academic Press, 1973.

A significant contribution to the textbook literature on the evaluation of performance in the field of physical education. Although it covers much conventional material on testing in this field, its unique features include the use of statistics in performance evaluation, a treatment of subjective evaluation, and a theoretical model for the measurement of performance and physical fitness. Works through a set of problems encountered in evaluating performance, e.g., developing categories to be rated, constructing a rating form, carrying out observations, and interpreting test scores.

Frederiksen, N. Factors in in-basket performance. Psychological Monographs, 1962, 76 (22, Whole No. 541).

Reports results of a study designed to identify some major dimensions of administrative performance. A factor analysis of the 70 aspects of behavior used to rate 335 people on an in-basket test revealed 8 primary factors, including informality, directing subordinates, discussing, and acting in compliance with suggestions.

Galson, N. J., & Oliker, L. R. Assessment of work outcomes in business administration (CAEL Special Project Report). Syracuse, N.Y.: Syracuse University, 1975.

Describes the development of a self-assessment instrument based on performance objectives from academic courses in business. Explains how the instrument can be used for assessing experiential learning and evaluating such learning for academic credit.

(11)

Ghiselli, E. E., & Brown, C. W. Personnel and industrial psychology. New York: McGraw-Hill, 1955.

Provides a taxonomy of rating methods with illustrations and describes the factors that affect reliability and validity of ratings.

Gill, B. A., Hoberman, S., & Persky, B. Developing and testing procedures and instruments for the assessment of the competencies of candidates for the child development associate credential. New York: Child Development Associate Consortium, May 1974.

A detailed research report covering identification of critical tasks in 11 functional areas; definition of criteria and standards for assessing competence; and development and testing of procedures, observation and interview instruments, and a training manual.

(2, 7)

Goldberg, L. R. Reliability of Peace Corps Selection Boards: A study of interjudge agreement before and after board discussions. Journal of Applied Psychology, 1966, 50, 400-408.

Findings from 9 Selection Boards studied appeared remarkably similar, indicating that Board discussions tend to (a) decrease the suitability ratings for the average trainee, (b) increase the average dispersion of ratings for the group of trainees, and (c) increase quite dramatically the degree of consensus among Board participants. The unusually high consensus among participants after Board discussion attests to the rationality--though not necessarily the validity--of the Peace Corps selection process.

Green, T. B., & Cotlar, M. Do filmed cases improve the case method? Training and Development Journal, 1973, 27, 28-31.

Summarizes a study in which the case method was combined with a film-based simulation as a mode of instruction in a management course. Criteria for evaluation are discussed, but assessment techniques are not.

Guilford, J. P. Psychometric methods. New York: McGraw-Hill, 1954.

A basic psychometric reference directed to an audience of graduate students in psychological measurement. May prove difficult for the reader with no background in measurement or statistics. Chapters on rating scales, reliability, and validity describe some of the basic issues and problems in the construction, use, and evaluation of rating scales.

Harvey, L., & Forrest, A. Use of portfolios in the assessment of prior experiential learning (CAEL Special Project Report). St. Paul, Minn.: Minnesota Metropolitan State College, 1975.

Describes and evaluates the process of portfolio development and assessment at MMSC (now Metropolitan State University). For more recent information on this program, see Calhoun, et al., annotated in Section 3.

Hoberman, S., Persky, B., & Williams, B. G. Report of a field study using a critical task behavior-anchored instrument to evaluate the competence of child development workers. New York: Child Development Associate Consortium, January 1975.

A field study that tested the reliability and validity of the procedures and behavior-anchored instruments described in Gill, Hoberman, & Persky (annotated above).

(2, 4)

Horn, R. E. (Ed.) The guide to simulations/games for education and training (3rd ed.). Cranford, N.J.: Didactic Systems, 1976.

A useful guide written for the practitioner rather than the theoretician. Contains articles on simulations and complete information on over 600 games and simulations designed for educational purposes.

Houston, W. R. (Ed.) Exploring competency based education. Berkeley, Calif.: McCutchan, 1974.

(2, 4, 7)

Job activity self-report questionnaire (JASRQ). Lafayette, Ind.: Purdue Research Foundation, 1969.

This questionnaire includes a listing of various job activities and conditions. For each one the candidate is asked to indicate how much of what type of experience he or she has had, present level of ability, and the level that he or she might be able to achieve with additional experience.

(7, 8, 9)

Johnson, C. E., & Bauch, J. P. Competency-based teacher evaluation guide. Athens: University of Georgia, College of Education, 1970. (ERIC Document Reproduction Service No. ED 042 698)

The checklist presented in this document is an initial attempt to provide a guide that would be effective in determining the extent to which teaching personnel at various levels have acquired particular competences. Evaluation in this guide is based on professional opinion or judgment, and it is recommended that the evaluators be carefully selected from among the most highly qualified specialists available.

*Knapp, J. Assessing prior learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 9, 11, 12)

*Knapp, J., & Sharon, A. A compendium of assessment techniques. Princeton, N.J.: CAEL, Educational Testing Service, 1975.

Describes a wide variety of assessment techniques that might be appropriate to different types of experiential learning. Includes sections on performance tests, simulations, interviews, ratings, product assessment, etc. Provides brief illustrations of different applications, and cites a number of references that provide more detailed information concerning each assessment method.

Knowles, M. S. Self-directed learning: A guide for learners and teachers. New York: Association Press, 1975.

(2, 5)

*See note on availability on p. 1-14.

Lopez, F. M., Jr. Evaluating executive decision making: The in-basket technique (AMA Research Study 75). New York: American Management Association, 1966.

A thorough treatment of the in-basket as a training and assessment technique in business. Based on material furnished to the author by a number of companies and other organizations; on the administration of an in-basket exercise to nearly 3,000 executives; and on the results of a special research project involving 726 executives. Sample materials are included.

Lopez, F. M., Jr. Evaluating employee performance. Chicago: Public Personnel Assocation, 1968.

A good nontechnical introduction to performance evaluation in business and industry. Although the principles sometimes have to be translated for educational purposes, much of the book could be relevant to assessing experiential learning--especially for on-site supervisors of work experience.

Marshall, V. C. How to assess college students during external placements: A British view. Journal of Cooperative Education, 1974, 10(2), 1-12.

(2)

Mayville, W. Contract learning. ERIC Higher Education Research Currents, December 1973.

(2, 4)

McClelland, D. C. Testing for competence rather than for "intelligence." American Psychologist, 1973, 28, 1-14.

(1)

McCormick, E. J., & Tiffin, J. Performance evaluation. In Industrial Psychology (6th ed.). Englewood Cliffs, N.J.: Prentice Hall, 1974.

A textbook chapter covering: purposes of performance evaluation in business and industry, types of performance evaluation systems (including rating scales, personnel comparison systems, behavioral checklists, the critical incident technique), assessment centers, reliability and validity, sources of possible distortions in evaluations, improving evaluations, and giving feedback.

McGuire, C. H. The oral examination as a measure of professional competence. Journal of Medical Education, 1966, 41, 267-274.

This study of oral examination in medical education reports the results of 158 half-hour observations of a real-life medical specialty board examination process. Most responses tended to be flat assertions of recall, with 91 percent of the responses unsupported by the citation of any authority in evidence. Coupling this with descriptions of the poor reliability of the process and the extremely high costs, the author appeals for reconsideration of the merits of oral examination. Reconsideration is aimed at developing new and better oral examinations, rather than abandoning the technique entirely.

McGuire, C. H., & Babbott, D. Simulation technique in the measurement of problem-solving skills. Journal of Educational Measurement, 1967, 4, 1-10.

A technical paper dealing with simulation techniques in medical education comparable to those used in management games and military exercises. A series of problems requiring sequential analysis and decision are developed for the purpose of measuring behavioral aspects defined by a criterion group as being basic components of clinical competence. The paper is part of a larger report addressing techniques of constructing, scoring, and assessing the validity and reliability of such problems.

McQueen, L., Fehnel, R., Moursund, J., Munoz, R., & Sundberg, N. Assessing interpersonal skills in the human services (CAEL Special Project Report). Eugene: University of Oregon, 1975.

Describes three experiments on five specially designed assessment instruments: observation scales for rating interpersonal skills in performance observations; a checklist of interpersonal experiences; an inventory of values; a questionnaire on field placement experiences; and an instrument for measuring understanding of brief tape-recorded statements which vary in primary and secondary message.

Menges, R. J. Assessing readiness for professional practice. Review of Educational Research, 1975, 45, 173-207.

An important research review which concludes that (1) defintions of effective practice should emphasize many discrete behaviors and characteristics rather than global definitions; (2) measures of these characteristics (predictors) should be as similar to the criterion itself as possible; (3) multiple assessment devices should be used so that no single type is overemphasized (in particular, measures of subject matter should be less heavily weighted); (4) data should not be used for decision making until longitudinal studies demonstrate adequate predictive validity; and (5) because increased assessment validity may be self-defeating in a competitive, adversary context (candidate vs. the certifying professionals), the assessors must move toward more open, collaborative evaluation.

Merritt, D. L. The teacher assessment center: A concept. Peabody Journal of Education, 1973, 50, 309-312.

(7)

Miller, J. W. Credit for nontraditional education: A conceptual framework for recognition. Educational Record, 1974, 55, 188-192.

(11)

Milton, O., & Edgerly, J. W. The testing and grading of students. New Rochelle, N.Y.: Change Magazine and Educational Change, 1976.

A useful introduction to traditional classroom practices of measurement and evaluation. Sensitizes the reader to problems inherent in most classroom examinations and provides instructions for effective test construction. Makes good use of clarifying examples, and makes clear the bond between desired learning outcomes, instruction, and testing practices.

Minnesota Metropolitan State College (now Metropolitan State University). Individualized educational planning. St. Paul, Minn.: Author, 1975.

(7, 9)

Nickse, R. S. Home management and human service competencies (CAEL Special Project Report). Syracuse, N.Y.: Regional Learning Service of Central New York, 1975.

(7, 11)

Nolting, G. A. Portfolio development versus course participation as it influences cognitive achievement in farm management. Unpublished Ph.D. Dissertation. Columbia: University of Missouri-Columbia, 1977.

Briefly shows the need for studies which document the validity and reliability of portfolio assessment as a means of awarding credit. Reports the results of pre- and post-tests used with traditional students enrolled in a regular class in farm management and with a group of nontraditional students who developed a portfolio of prior learning in the area of farm management.

(9, 11)

Panitz, A., & Olivo, T. C. Handbook for developing and administering occupational competency testing. New Brunswick, N.J.: Rutgers University, 1971.

Provides a step-by-step description of the development, administration, scoring, and analysis of occupational work sample tests.

Parry, S. B. The name of the game is simulation. Training and Development Journal, 1971, 25, 28-32.

Explains the rationale for using games and simulations, with some examples, and makes the interesting distinction between simulations designed as application of prior learning and those intended to give the learner an opportunity to gain insight into his or her own behavior.

Payne, D. A. (Ed.) Curriculum evaluation: Commentaries on purpose, process, product. Lexington, Mass.: D. C. Heath, 1974.

(7, 8)

Politoske, D. T. Grading the advanced placement music examination. Princeton, N.J.: Advanced Placement Program, College Entrance Examination Board, 1976.

Describes the step-by-step procedures employed in the Advanced Placement Examination grading process. Includes sample grading standards, guidelines for scoring, and samples of graded responses. Similar reports are available for other subject areas in which Advanced Placement examinations are offered, but the process described in this publication has general applicability.

Primoff, E. S. Research on efficient methods in job element examining (Report No. 1: Research of the additive checklist). Washington, D.C.: Civil Service Commission, 1970. (Unpublished study)

This study describes how to develop a job inventory checklist and reports the results of studies using the checklist for the selection of workers in various trades.

*Reilly, R. R., Churchill, R., Fletcher, A., Miller, M., Pendergrass, J., Stutz, J. P., & Clark, J. L. D. Expert assessment of experiential learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

Provides principles and guidelines for the use of judgment in assessment, covering such basic issues as the role of the expert in defining criteria and structuring the assessment procedure so that it will be as reliable and valid as possible, the importance of establishing standards that are defined as systematically and objectively as possible, and the manner in which common rating errors affect the credibility and the fairness of assessment. Application of these principles and procedures to experiential learning is discussed in practically-oriented chapters on interviews, product assessment, performance assessment, and the assessment of written material.

(11)

Rouse, M. J. The development of a descriptive scale for art products. Bulletin of the School of Education, Indiana University, 1968, 44(1).

A useful example of the development and validation of a rating scale. The instrument was designed to describe in quantitative terms the characteristics of children's art products. It comprises six sub-tests each consisting of from two to five items. A 5-point scale is associated with each item.

See note on availability on p. 1-14.

Sharon, A. T. Planning the development of measurement and evaluation services for use in occupational programs at postsecondary institutions (Final Report submitted to the Fund for the Improvement of Postsecondary Education) (Project Report PR-74-16). Princeton, N.J.: Educational Testing Service, 1974.

Report of a project conducted to explore the needs of post-secondary institutions for occupational competency measures. Focus is on translating work experience into degree or certificate credit in eight prototype occupations. A useful summary addresses such topics as institutional and individual assessment needs, available instruments and procedures, and implementation of assessment procedures.

(3, 11)

*Sharon, A. Assessing occupational competences--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

Describes a model for assessing specific competences acquired in work situations that are relevant to occupationally-oriented degree programs. Designed to help a college specify the kinds of competences acquired in various occupational settings, to define the learning objectives of occupational and career programs, and to translate competence into college credit where appropriate. Describes the application of the model to data processing, law enforcement, and secretarial science and shows how it can be applied to other occupations. Prototype assessment instruments and procedures are included.

(7, 8)

Shouksmith, G. Assessment through interviewing: A handbook for individual interviewing and group selection techniques. New York: Pergamon Press, 1968.

Discusses interview procedures from business and industry, but many of the ideas are applicable to education and the assessment of experiential learning. The usefulness of the interview as an assessment technique depends upon three factors: excluding or controlling bias, recognizing that the interview cannot make fine distinctions, and determining the appropriateness of the interview in a particular situation by specifying exactly what is to be assessed.

*See note on availability on p. 1-14.

Simon, A., & Boyer, E. G. (Eds.) Mirrors for behavior: An anthology of observation instruments. Philadelphia: Research for Better Schools, 1967. (Summary volume, ERIC Document Reproduction Service No. ED 031 613)

A 14-volume anthology of 79 observation systems used primarily in classroom settings.

Smith, P. C., & Kendall, L. M. Retranslation of expectations: An approach to the construction of unambiguous anchors for rating scales. Journal of Applied Psychology, 1963, 47, 149-155.

Procedures are described for obtaining content valid rating scales that are anchored by examples of expected behaviors. These were tested on groups of head nurses who were to judge their nursing personnel on various characteristics. Results show excellent discrimination and high reliability.

*Spitzer, K., & Smock, S. The refinement and modification of an instrument for assessing the achievement of interpersonal skills of social work students (CAEL Institutional Report No. 4, Wayne State University). Princeton, N.J.: CAEL, Educational Testing Service, 1975.

Includes 12 checklists for rating student learning in 3 areas: basic educational and performance skills, communication and observation skills, and problem-solving skills. Although designed for field experience in social work, the checklists involve a number of generic skills that apply to many other types of field expereince.

Student Involvement Assistance Center. Directory. Olympia: Washington State Department of Personnel, Interagency Training Division, 1973. (Available from Student Involvement Assistance Center Department of Personnel, Interagency Training Division, P. O. Box 1789, Olympia, Washington 98504)

(2, 11)

*See note on availability on p. 1-14.

Sundberg, N. D. Assessment of persons. Englewood Cliffs, N.J.: Prentice-Hall, 1977.

An introduction to individual assessment, including interviewing, observation, relation of persons to contexts and life history with a competence view of personality.

Thorndike, R. L. (Ed.) Educational measurement (2nd ed.). Washington, D.C.: American Council on Education, 1971.

Since its first edition in 1951, this comprehensive volume has been regarded as one of the leading reference works in the theory and techniques of educational measurement. In this completely rewritten second edition, chapters by 23 authorities deal with test design, construction, administration, and processing, types of tests, measurement theory, and the application of tests to education problems. Chapters by Fitzpatrick & Morrison (on performance and product evaluation) and Coffman (on essay examinations) are annotated separately in this section.

Thornton, G. C., III, & McCambridge, J. A. The application of assessment centers to the evaluation and development of graduate students. Paper presented at the meeting of the Rocky Mountain Psychological Association, Las Vegas, Nevada, 1973. (Available from G. C. Thornton, III, Department of Psychology, Colorado State University, Fort Collins, Colorado 80521)

Describes an educational use of the assessment center concept which served to familiarize industrial/organizational psychology students with job demands, identify personal strengths and weaknesses, outline remedial training experiences, and provide a basis for subsequent advising and guidance by faculty members.

Valentine, J. A. Learning: Questions of standards and credit. New York University Education Quarterly, 1977, 8(2), 2-8.

(11)

Ward, L. B. The interview as an assessment technique. In College admissions (Vol 2). New York: College Entrance Examination Board, 1955.

Cites research evidence questioning the value of admissions interviews for the purpose of evaluating whether or not a student is likely to succeed if admitted. Argues that the interview should be judged for its value in personalizing education, its use for informational purposes, and its effect on the motivation and morale of students.

Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. Unobtrusive measures: Nonreactive research in the social sciences. Chicago: Rand McNally, 1966.

Describes various types of unobtrusive techniques and the reasons for using them. Summarizes a large number of investigations that employed such techniques.

Whitaker, U. G. Assessors and their qualifications. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

Presents a six-step model for the selection of assessors based on identification and analysis of participants, functions, and characteristics, as well as the critical relationships among these variables.

(5)

Wilds, C. P. The oral interview test. In R. L. Jones & B. Spolsky (Eds.), Testing language proficiency. Arlington, Va.: Center for Applied Linguistics, 1975.

Describes the testing procedures and evaluation techniques associated with a rating system for evaluating speaking proficiency in a foreign language. Ratings are made on a numerical scale wherein each point has a careful and detailed definition, in both linguistic and functional terms.

Willingham, W. W. Critical issues and basic requirements for assessment. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.

(4)

*Willingham, W. W. Principles of good practice in assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

Provides a single-source overview of important principles of good assessment practice as represented in the 26 CAEL reports current in 1977. Presents procedural guidelines in outline form with reference to fuller discussion in other CAEL publications.

(7, 8, 9, 11, 12)

*Willingham, W. W., & Associates. The CAEL validation report. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

A major CAEL publication that reports extensive findings from a series of 10 field studies involving more than 1,000 faculty and students in 24 institutions throughout the country. Evaluates assessment practices and examines a number of assumptions underlying the assessment of experiential learning. The primary research reference available that speaks to strengths and weaknesses in assessing experiential learning and how to improve institutional quality assurance. Includes three illustrative institutional studies of the reliability of expert judgment.

*Willingham, W. W., Valley, J. R., & Keeton, M. T. Assessing experiential learning: A summary report of the CAEL project. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

Provides an overview of the major activities of CAEL's first three years. Includes a brief history of CAEL, a description of the developmental work, selected important outcomes of the field research, and descriptions of the more significant outcomes of the Operational Models Project and the Faculty Development Program. Gives an overall sense of what the project accomplished and what major conclusions and implications can be drawn from the effort.

(1, 3, 5)

Wilson, J. W. Impact of cooperative education upon personal development and growth of values. Boston: Northeastern University, 1974.

(4, 7)

*See note on availability on p. 1-14.

Wilson, J. E., & Tatge, W. A. Assessment centers--Further assessment needed? Personnel Journal, March 1973, 172-179.

Acknowledges that the assessment center accomplishes the collection and analysis of data more effectively than most traditional methods--and is more costly. Questions whether these centers can make a greater contribution to the selection decision (the goal in the business/industry context) than the more economical traditional methods. Concludes that considerable research is needed to justify assessment center claims for superiority.

(6)

Wright, O. R., Jr. Summary of research on the selection interview since 1964. Personnel Psychology, 1969, 22, 391-413.

The most thorough review of the research literature on interviewing--devoted only to quantitative studies. Although the interview in question here is a selection interview in an employment context, much of the literature is relevant as well to interviews used for assessing experiential learning. For example, one consistent finding of interest to assessors of experiential learing was that independent judges can assess interviewee behavior as validly and as accurately as the participant interviewer.

SECTION 11. EVALUATION

Evaluation, an important step in the assessment process, involves determining whether the demonstrated learning meets a specified standard and how much credit should be awarded. For sponsored programs this means setting standards before the learning experience begins; for prior learning it means determining the standard after the nature of the learning has been determined. This section includes references on how standards may be set (and by whom), comparisons with evaluation in traditional settings, and examples of various methods and procedures for crediting experiential learning.

Aviation Education Review Organization. College credit standards guide: A guide to assist colleges and universities in evaluating aeronautical educational experiences. Washington, D.C.: Aviation Education Review Organization, Air Line Pilots Association, 1973.

Standards developed in consultation with institutions of higher education which include aeronautical courses and programs in existing offerings. Assessment of programs included comprehensive evaluation of prescribing directives and review of educational achievements of graduates of the various programs. Credit recommendations are listed for each program.

Barak, R. J., & McCannon, R. S. Learning in an open society: Credit for experience. Des Moines, Iowa: Drake University, 1975.

Includes 8 papers, 4 of which were presented at a spring 1974 conference sponsored by the American Association for Higher Education under its Regional Conference Series. Most of the papers discuss problems and experiences in evaluating prior and sponsored experiential learning.

Bloom, B. S., & Others. Taxonomy of educational objectives, Handbook I: Cognitive domain. New York: Longmans Green, 1956.

A classic attempt to build a classification system (i.e., taxonomy) of educational goals. Useful in the experiential learning context as an aid in identifying levels of competence and evaluating learning outcomes. A companion handbook on the affective domain was published in 1964 (Krathwohl, Bloom, and Masia).

*Calhoun, A., Deegan, J., Harvey L., & Libera, C. An individualized competence-based assessment model (CAEL Institutional Report from Metropolitan State University). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3, 5)

Christ-Janer, A. F. Credit by examination. In D. W. Vermilye (Ed.), The expanded campus (Current Issues in Higher Education 1972). San Francisco: Jossey-Bass, 1972.

Historic overview of the credit by examination option in higher education including its relationship to the external degree concept.

*Churchill, R., Guerrero, A., Hartle, J., & Horwitz, H. Coordinating educational assessment across college centers (CAEL Institutional Report from Antioch College). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3, 12)

*Daloz, L. A., & Pitkin, C. Standard setting by students and community--How much is enough? (CAEL Institutional Report from Community College of Vermont). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Extends the position that the highest purpose of education is to foster both community and individual self-reliance. It describes the process and materials developed to help students and local review committees agree on standards that are unique to student goals, that accurately reflect community expectations, and that conform to the institution's educational principles. It lists the steps through which student and committee go in the degree development sequence.

Duley, J. (Ed.) Implementing field experience education (New Directions for Higher Education, No. 6). San Francisco: Jossey-Bass, 1974.

(2, 3, 4)

*See note on availability on p. 1-14.

Ekstrom, R. B., & Lockheed, M. E. Giving women college credit where credit is due. Findings: A Quarterly of ETS Research in Post-secondary Education, 1976, 3(3), 1-5.

(4, 6, 7)

Felmley, J. Working women: Homemakers and volunteers. Washington, D.C.: Business and Professional Women's Foundation, 1975.

(1, 7)

*Forrest, A. Assessing prior learning--A CAEL student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 9, 10, 12)

*Fremer, J. Setting and evaluating criterion standards. In W. W. Willingham & H. S. Nesibitt (Eds.), Implementing a program for assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

Draws on some of the work at institutions such as Empire State College and Thomas A. Edison College and reviews a number of topics that must be dealt with in the course of designing and implementing standard-setting procedures for experiential learning programs so that these can be applied when the assessment process reaches the stage of awarding academic credit or recognition for the learning.

Galson, N. J., & Oliker, L. R. Assessment of work outcomes in business administration (CAEL Special Project Report). Syracuse, N.Y.: Syracuse University, 1975.

(10)

Kimmel, E. W. Problems of recognition. In S. B. Gould & K. P. Cross (Eds.), Explorations in non-traditional study. San Francisco: Jossey-Bass, 1972.

Contrasts traditional evaluation and recognition of educational achievement with some nontraditional alternatives.

*See note on availability on p. 1-14.

*Knapp, J. Assessing prior learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 9, 10, 12)

Lierheimer, A. P. Guidelines for awarding academic credit for knowledge gained from work & life experience. Memorandum to Chief Executive Officers of Institutions of Postsecondary Education in New York State. No. 29. Albany, N.Y.: State Education Dept., October 15, 1975.

The memo transmits an 8-point guideline statement and a four-item bibliography. The guidelines cover: basis for awarding credit; relationship to degree programs; advice and orientation of students; communication with student; and records.

Miller, J. W. Credit for nontraditional education: A conceptual framework for recognition. Educational Record, 1974, 55, 188-192.

Illustrates the complementary nature of two methods of awarding credit for prior learning: ACE's accreditation of classroom learning in business and industry and CAEL's appraisal of learning outcomes of individual students.

(10)

Miller, J. W., & Sullivan, E. J. A guide to the evaluation of educational experiences in the armed services. Washington, D.C.: American Council on Education, 1975.

Appraisal of various and numerous training and testing programs in all sections of the armed services. Each citation includes a credit recommendation. Sequel to the CASE guide.

Nickse, R. S. Home management and human service competencies (CAEL Special Project Report). Syracuse, N.Y.: Regional Learning Service of Central New York, 1975.

(7, 10)

*See note on availability on p. 1-14.

Nolting, G. A. Portfolio development versus course participation as it influences cognitive achievement in farm management. Unpublished Ph.D. Dissertation. Columbia: University of Missouri-Columbia, 1977.

(9, 10)

O'Neil, E. H., & Sloan, B. J. Awarding credit for prior learning experiences: A manual for more traditional institutions of higher education (CAEL Special Project Report). University, Ala.: New College, University of Alabama, 1975.

A practical set of guidelines for traditional institutions related to awarding credit for prior experiential learning.

*Permaul, J. S., & Miko, M. B. Documentation and evaluation of sponsored experiential learning (CAEL Institutional Report No. 3, University of California at Los Angeles) (Rev. ed.). Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(9)

Radloff, B. There's more than one way to earn a college degree. Carnegie Quarterly, 1975, 23 (4), 1-7.

A well-written article discussing the realization that higher education has a responsibility to meet the educational needs of many people who have been bypassed by conventional educational procedures. Offers concise descriptions of the following options available for degree-pursuing students: credit by examination, credit for learning through experience, and credit for courses taught by nonacademic institutions.

*Reilly, R. R., Churchill, R., Fletcher, A., Miller, M., Pendergrass, J., Stutz, J. P., & Clark, J. L. D. Expert assessment of experiential learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(10)

*See note on availability on p. 1-14.

Serling, A. M. Evaluating experiential learning. Paper presented at the Institute for Undergraduate Curricular Reform, Queens College, Charlotte, N.C., March 1975.

A review of a number of issues associated with awarding credit for experiential learning. Includes an overview of the evaluation approach used at Empire State College.

Shapek, R. A. Experiential education and service learning internships in Texas. In A. C. Neidhart (Ed.), Continuing education for Texas: Special studies of non-traditional approaches to education. San Marcos: Southwest Texas State University, 1974.

(2, 3)

Sharon, A. T. Planning the development of measurement and evaluation services for use in occupational programs at postsecondary institutions (Final Report submitted to the Fund for the Improvement of Postsecondary Education) (Project Report PR-74-16). Princeton, N.J.: Educational Testing Service, 1974.

(3, 10)

Student Involvement Assistance Center. Directory. Olympia: Washington State Department of Personnel, Interagency Training Division, 1973. (Available from Student Assistance Center Department of Personnel, Interagency Training Division, P. O. Box 1789, Olympia, Washington 98504)

(2, 10)

Trask, A. E. Academic credit for community service learning. Findings: A Quarterly of ETS Research in Postsecondary Education, 1975, 2(1), 1-4.

Reports on procedures used to award credit in University Year for ACTION (UYA) programs. The study, conducted in 1973-74 by ETS, surveyed 53 colleges and universities with UYA programs.

Trivett, D. A. Academic credit for prior off-campus learning (ERIC/ Higher Education Research Report No. 2). Washington, D.C.: American Association for Higher Education, 1975.

Reviews formal and unpublished literature as well as programs relating to the recognition of experiential learning. The author shares CAEL's view of the distinction between prior and sponsored learning and this paper focuses on the former. Begins with a discussion of the rationale for crediting prior off-campus learning and the issues that surround it. College-level examination programs such as CLEP, academic credit through noncollegiate organizations such as CASE and DANTES, external degree programs, and the assessment of the learning outcomes of life and work experience are described. Several pages are devoted to the CAEL project and its publications. (1, 2)

University of the State of New York. A guide to educational programs in noncollegiate organizations. Albany: University of the State of New York, State Education Department, 1974.

Describes formal educational programs conducted by business, government, labor unions, professional associations, and other organizations within the state of New York whose primary activity is not education. For each program (reviewed by a team of evaluators) recommendations are made for the granting of college-level academic credit.

Valentine, J. A. Learning: Questions of standards and credit. New York University Education Quarterly, 1977, 8(2), 2-8.

Discusses some of the assumptions about curriculum standards and practices that underlie the award of credit for traditional collegiate learning and whether these are appropriate guides for the crediting of learning that occurs outside the academy.

(10)

Vittuli, R. A., Hitt, J. K., Guilford, W. B., & Grose, R. F. How long is a credit? When is a course? College and University, 1970, 45, 370-380.

An AACRAO symposium on standards for units, credits, and courses. This discussion was occasioned by calendar innovations and changing lengths of terms, but the same problems of credit definition confront faculty and administrators in experiential learning programs. Definitions of credit are offered, but no solutions to the problems are provided.

Waddell, J., & Metzen, M. E. Working paper on methods of degree review, evaluation, and procedures used by University Without Walls programs. Unpublished working paper, 1976. (Available from Stephens College, Columbia , Missori 65201)

This working paper describes criteria used by UWW programs to determine students' achievements in baccalaureate learning.

Warren, J. External degrees: Coping with the problems of credit. Journal of Higher Education, 1973, 44, 465-475.

Advocates quality control in awarding credit and suggests procedures for improving expert judgment in the credit award process such as specifying desired capabilities; multiple criteria and multiple indicators; direct examinations; assessment by others; and student products.

Warren, J. R. Awarding credit. In K. P. Cross, J. R. Valley, & Associates, Planning non-traditional programs: An analysis of the issues for postsecondary education. San Francisco: Jossey-Bass, 1974.

Provides a good discussion of the relationship between means of assessment and means of crediting. Proposes a system in which credits would be based upon competences attained without regard to length of time spent in an activity or its relation to a 15-week semester. Assessment procedures and criteria would also vary according to the purpose of the learning experience. For example, a student preparing for a career in business might be evaluated on a different set of criteria and by different procedures than a student planning to study law or pursue graduate studies in political science.

Williams, T. J. Faculty and student attitudes toward intern evaluation. Public Service Internship News, March-April 1974, 5-8.

Centers on evaluation as the process of assigning an intern a course grade. Presents some data describing elements of an internship considered to be important by student interns and by the responsible faculty members. Concludes with the counsel to offer faculty information on available methods of evaluation, how other people feel about them, and the aspects of the internship considered important by others.

(5)

Willingham, W. W. College placement and exemption. New York: College Entrance Examination Board, 1974.

Using decision theory, particularly the notion of trait-treatment interactions, the author develops a framework of 12 models for sorting students into groups for more effective instruction and learning. See Chapter 6 for a general discussion of these approaches to recognition of prior learning--examination, accreditation, and documentation. Gives a brief history of the development of ways in which learning acquired in one institution is recognized or credited in another.

*Willingham, W. W. Principles of good practice in assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 9, 10, 12)

*Willingham, W. W., & Nesbitt, H. S. (Eds.) Implementing a program for assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3, 6)

*Wylie, N. Implementing competency-based assessment of prior learning (CAEL Institutional Report from Florida International University). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3)

*See note on availability on p. 1-14.

SECTION 12. TRANSCRIPTION

How to record credit or recognition for experiential learning poses special problems because the learning often does not fit traditional course labels or descriptions. The referecnes in this section describe various types of alternative transcripts and give an overview of problems--e.g., how to represent learning accurately and appropriately for third parties, how nontraditional records of learning are viewed by various groups, etc.

Bailey, R. L. (Ed.) A report of the sub-committee to survey the acceptance of non-traditional grading patterns by government, industry and/or graduate institutions. Park Forest South, Ill.: Governors State University, 1972. (ERIC Document Reproduction Service No. ED 062 916)

Five papers concerning nontraditional grading systems and their acceptance including employer, graduate/professional school, and student points of view. Professional schools are least receptive to pass/fail or pass/no-credit notation.

Burt, S. M. An overview of the dilemma of the college undergraduate transfer student: Implications for national policy relating to higher education. Washington, D.C.: U. S. Office of Education, Federal Interagency Committee on Education, 1972. (ERIC Document Reproduction Service No. ED 081 306)

Discusses major dimensions of the dilemma of the transfer student category which includes those students coming from community colleges, nontraditional and external degree programs, armed services, and prisons. The percentage of transfer students has risen from 7.5% in 1963 to 8.1% in 1968. Many transfer students seeking enrollment have life learning which is creditable toward a degree.

*Churchill, R., Guerrero, A., Hartle, J., & Horwitz, H. Coordinating educational assessment across college centers (CAEL Institutional Report from Antioch College). Princeton, N.J.: CAEL, Educational Testing Service, 1976.

(3, 11)

*See note on availability on p. 1-14.

*Forrest, A. Assessing prior learning--A CAEL Student guide. Princeton, N.J.: CAEL, Educational Testing Service, 1977.
(7, 8, 9, 10, 11)

Forrest, A., Ferguson, R. L., & Cole, N. S. The narrative transcript: An overview. Educational Record, 1975, 56, 59-65.

Seven types of narrative transcripts (written reports of student attainment) are described and their advantages and disadvantages discussed.

Forrest, A., Knapp, J. E., & Pendergrass, J. Tools and methods of evaluation. In M. T. Keeton & Associates, Experiential learning: Rationale, characteristics, and assessment. San Francisco: Jossey-Bass, 1976.
(10)

*Knapp, J. Assesing prior learning--A CAEL handbook. Princeton, N.J.: CAEL, Educational Testing Service, 1977.
(7, 8, 9, 10, 11)

Knapp, J., & Hamilton, B. An exotic salad of strange fruit: Estimating the effect of emerging undergraduate assessment and reporting practices on graduate admission procedures (Final Report submitted to the Graduate Record Examination Board). Princeton, N.J.: Educational Testing Service, in preparation.

Reports results of surveying atypical undergraduate credentials and how they are processed and interpreted by graduate schools. The effects of transcript notation such as credit by examination, pass-fail grading, narrative descriptions of achievement, and credit for experiential learning on graduate admissions procedures are discussed.

*See note on availability on p. 1-14.

Morishima, J. K. & Others. Acceptability of non-traditional grading: Views of college and university admission officers and prospective employers. Seattle, Wash.: Washington University, Office of Institutional Educational Research, 1972. (ERIC Document Reproduction Service No. ED 077 364)

A report of a study of the evaluation of traditional and non-traditional transcript/grading systems by graduate schools and employers. The respondents indicated the relative acceptability of the systems in their own institutions and organizations.

Pascal, N., Ferraro, N. E., Willer, C., & Hickok, S. Creative recording. College and University, 1975, 50, 711-712.

Summary of a session at the 1975 annual meeting of the American Association of Collegiate Registrars and Admissions Officers. Reports on a Task Force on Non-Traditional Programs and Assessment and brings to light many questions regarding narrative evaluation. A list of colleges and universities with non-traditional grading systems, compiled at the College Recorder's Office, New College, Sarasota, Florida, was distributed at the meeting.

*Willingham, W. W. Principles of good practice in assessing experiential learning. Princeton, N.J.: CAEL, Educational Testing Service, 1977.

(7, 8, 9, 10, 11)

*See note on availability on p. 1-14.

PART C. ALPHABETICAL LISTING OF ALL ENTRIES

Starred items in this list indicate CAEL publications. See p. 1-14 for a note on availability and inside front cover for address.

A

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